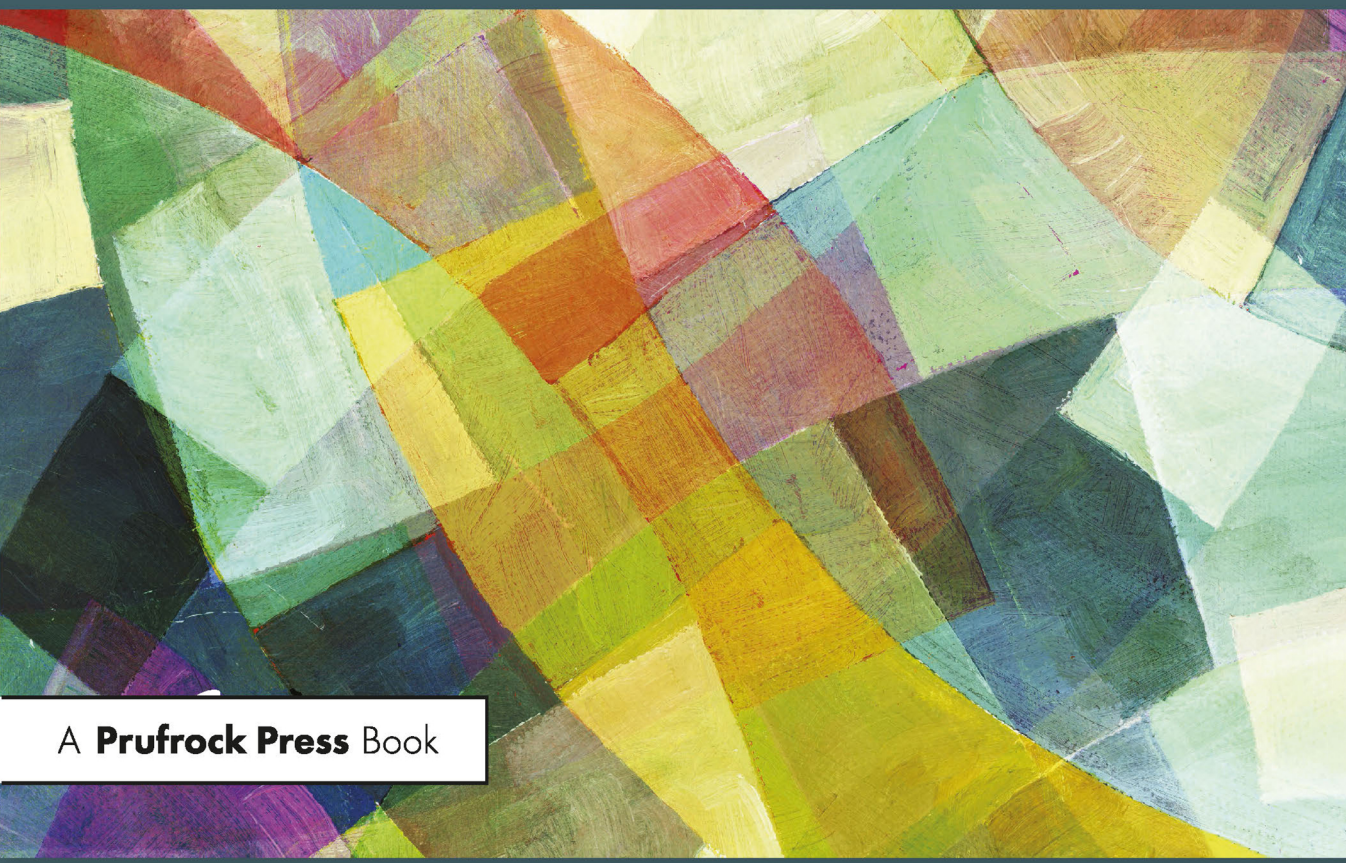
Second Edition

Handbook for COUNSELORS SERVING STUDENTS WITH GIFTS & TALENTS

Development, Relationships, School Issues, and Counseling Needs/Interventions



A **Prufrock Press** Book

EDITED BY
TRACY L. CROSS, PH.D., & JENNIFER RIEDL CROSS, PH.D.

Handbook for
COUNSELORS
SERVING STUDENTS WITH GIFTS & TALENTS



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Introduction

Tracy L. Cross and Jennifer Riedl Cross

When the first edition of *Handbook for Counselors Serving Students With Gifts and Talents* (*Handbook*) was published in 2012, there was no resource like it. Our conception for that book derived from two simple but important observations: (a) Professionals who provide counseling services to gifted students do not have preparation in their initial training programs on the nature and needs of students with gifts and talents, and (b) at the time, there was no comprehensive book for them to draw on during their professional practice that could help them in real time. Of course, the ramifications of these simple observations are rather serious when combined with the reality that most school counselors have average caseloads of 350–500 students. The first edition of the book was designed to support the efforts of hardworking counselors who needed more information. Having served as editors of five journals in the field (*Research Briefs*, *The Journal of Secondary Gifted Education*, *Gifted Child Quarterly*, *Roeper Review*, and *Journal for the Education of the Gifted*), we knew of the work of all of the authors who were invited to make contributions. These experts in the field graciously shared their expertise. The *Handbook* was awarded the 2012 Texas Association for the Gifted and Talented Legacy Book Award in the Scholar category and was listed as a milestone in the timeline of Colangelo and Wood's history of counseling the gifted individual published in the *Journal of Counseling & Development* in 2015. In addition, we hear from readers of the book regularly. We are confident that we

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have been successful in reaching many counselors who have benefitted from having such a resource.

Updates to the New Edition

To continue to be effective, it is important that the chapters in the *Handbook* reflect the most up-to-date information. Significant research has been conducted, our authors are older and wiser, and new voices have messages for counselors to hear. We sent out our invitation to authors in February of 2019, inviting them to revise their chapters or, in some cases, write new ones, pointing out:

> In some ways, students with gifts and talents face a new world today, with changes in technology, society, and schools. School shootings, the opioid epidemic, political upheaval, expanding social inequality, civil unrest, war, forced migration, and other maladies are impacting students today, directly and indirectly, with implications for counselors.

At the time, COVID-19 had not made the headlines, and we had no idea what changes were in store for all of us in 2020.

The second edition of the *Handbook* retains its organization, with updated chapters and several new ones. We have several new authors who tackled topics from the original book. Each of these authors brings a fresh perspective on important topics, such as twice-exceptionality (Ashley Y. Carpenter), social coping (Sakhavat Mammadov), underrepresented populations (Nancy Chae and Citlali E. Molena), school psychologists (Janise Parker and Hannah Warren), and mental health issues (Susannah M. Wood). It was timely to add a chapter on transgender students with gifts and talents (SWGT), which was deftly covered by Orla Dunne. Although several chapters in the original *Handbook* referenced acceleration as a programming option, we were delighted when Ann Lupkowski-Shoplik and Wendy A. Behrens agreed to provide a chapter on the topic. Susannah M. Wood shares her expertise on the role of school counselors working with students with gifts and talents. The Talent Development Megamodel (TDMM) has emerged as a critical framework for understanding giftedness and gifted education since the first edition of the *Handbook* was published. Frank C. Worrell, Rena F. Subotnik, and Paula Olszewski-Kubilius, the authors of the comprehensive monograph and numerous follow-up publications on the TDMM, offer their take on its implications for counselors in their chapter. Finally, you will see that several authors took on new coauthors to help bring their chapters up to date. We

were deeply saddened by the unexpected death in 2013 of our good friend and mentor Larry Coleman, who worked hard to compile the research in his chapter on "Lived Experience, Mixed Messages, and Stigma." Larry's wife, Betty, approved the two of us making updates to his chapter for the second edition. We tried to honor Larry's voice as he channeled the students he cared so much about, updating the piece with current research but attempting to keep his explanations and interpretations intact. We hope he would be pleased.

The addition of Orla Dunne's chapter on transgender SWGT is a powerful complement to Terrence Paul Friedrichs's chapter on LGBTQ SWGT. When the first edition was published, there was no resource like Friedrichs's chapter in a mainstream publication. Providing insight and resources into the lives of these students, we hope that chapter benefitted many LGBTQ students. Friedrichs's and Dunne's chapters in this edition will be similarly groundbreaking in what they offer counselors. Supporting LGBTQ students linguistically, we made the decision to remove reference to gender whenever possible in this edition. Although some readers may cringe at the use of the singular "they," we encourage you to explore the changes happening worldwide, as people try to become more inclusive and egalitarian in their appreciation of nonbinary friends, family, colleagues, and students. The acronym SWGT—students with gifts and talents—is also an effort to remove the chains of language that tie people to old conceptions of who students are and what they are worth. The people-first language, although a mouthful, helps shed the framing of giftedness as an entity possessed by a student regardless of their experiences. Perhaps changing the language can help people focus on the role of context and resources that go into developing students' gifts and talents. We hope to set an example by including the acronym in our writing. When others are ready, we hope they will join us.

Ultimately, we believe that this book represents each of the topics in a logical and coherent manner, while at the same time manifesting a consistent developmental attitude about each subject. We believe that if we can get counselors and psychologists who serve SWGT to read this book and keep it in their libraries, the lives of many students will be improved. We also believe that the lives of the professionals will be improved. Because of its breadth and accessibility, the book works well both as a handbook for professionals providing counseling services and as a text for graduate-level courses on the social and emotional development of students with gifts and talents. We are pleased that the second edition has an index, making it even more useful to readers.

Part of the difficulty in creating a handbook that will actually be used is to make the reading material both interesting and factual for a wide range of readers. It needs to encourage the counselor to read broadly and serve as a reference point for specific questions. To those ends, we challenged the authors to write in an

engaging academic style that is replete with the appropriate facts of the topic. A more difficult but less obvious challenge is to provide the reader with information in a relatively definitive manner (for ease of understanding) as well as a contextual manner that includes all sorts of nuances and qualifiers. For example, understanding issues of identification depends on the rules and regulations of the specific context. It could also be affected by other locations in which the SWGT may have lived. The talent area of the student and their gender, socioeconomic status, and so forth are all contextual variables that a counselor needs to understand. On the other hand, knowing the school district's definition of giftedness would be an appropriate first level of knowledge to have. How the schools attempt to assess the student might be the next level of knowledge to have. Counselors may, however, be drawn into the issue at any time or within any question or concern. This can lead to a counselor offering comfort when, in fact, what the student may need is an advocate.

Organization of the Book

This book can benefit the reader, whether used as an occasional reference or as a tutorial for those who want to understand SWGT at a much more detailed and nuanced level. As in the first edition, the book is comprised of six sections: (1) Theoretical Foundations/Conceptions of Giftedness, (2) Special Populations, (3) Developmental Issues, (4) Relationships, (5) School-Related Issues, and (6) Counseling Needs/Interventions.

The first section, Theoretical Foundations/Conceptions of Giftedness, provides the reader with a significant overview of the foundations for understanding SWGT and how they might be served in schools. Entire books have been written on the many conceptions of giftedness, while others have focused on a single conception. We chose those we value most for serving counseling needs at this time in history.

The second section, Special Populations, is of great importance as education evolves from the political need to be inclusive to the scientific-empirically validated need to serve SWGT at the individual level. The tension between the two competing goals in our field of finding effective teaching practices for groups of SWGT and maximizing the potential of all students lead us back to the ultimate importance of understanding and providing for individual SWGT. This section provides evidence to that end.

In the third section of the book, Developmental Issues, the focus is on the diverse issues that have proven to be of unique concern in the development of individuals with gifts and talents. Being gifted often means feeling aberrant.

Therefore, growing up gifted complicates the typical developmental patterns as these students progress through the common stages while dealing with typical issues of children and adolescents. Gifted-specific issues bring experiential differences and require counselors to understand the nature and needs of the individual child within a specific school context. These chapters provide considerable evidence of the similarities and differences in the nature and needs of SWGT and the general population of students.

The fourth section of the book, Relationships, is a relatively novel section in books in our field. This rather unique contribution offers the reader some research from inside and outside of our field to help counsel SWGT. Lived experience research is somewhat new to the field, having begun in earnest a little more than 3 decades ago. In that time, it has shed light on several aspects of the lives of SWGT, including on their suicidal behavior. The social lives of SWGT can be complicated by their giftedness. Bringing together research on their critical relationships elucidates the necessity of working collaboratively on behalf of this population. It also reveals very interesting influences on the psychological well-being of SWGT.

The fifth section, School-Related Issues, offers the counselor information and insight into actual practices and opportunities within gifted education. The identification of SWGT, academic planning, underachievement, and career planning are matters within the professional practice of counselors. Talent Search programs and classroom strategies are educational opportunities and practices that counselors need to know about and recommend as appropriate. Relationships with school counselors and school psychologists represent very important opportunities for the counselor to assist SWGT. From assessment issues to program options, these professionals often hold the key to the options available to SWGT and their families. Working collaboratively will enhance the experience of SWGT in the counselor's school.

The final section of the book, Counseling Needs/Interventions, provides important contemporary topics from research bases that have grown significantly during the past several decades. Much of the information provided in these chapters did not exist until recently. When a counselor is unfamiliar with giftedness and the many concomitant issues covered in this book, they may attempt to fit presenting problems into familiar boxes. This section provides an overview of counseling issues, along with several chapters on gifted-specific topics. From preventing misdiagnoses to preventing suicide, the approach a counselor takes with SWGT should be informed. These chapters will help counselors develop their ability to differentiate their practice for these unique young people.

We are hopeful that the 42 chapters of this book, contributed by true scholars in the field of gifted education, can reduce the burden on counselors and psychologists in their provision of services to SWGT. We also hope that the book

leads to a lessening of the often-felt anxiety on the part of counselors who desire to provide more services to these students while at the same time enhancing the psychological well-being of SWGT.

Reference

Colangelo, N., & Wood, S. M. (2015). Counseling the gifted: Past, present, and future directions. *Journal of Counseling & Development, 93*(2), 133–142. https://doi.org/10.1002/j.1556-6676.2015.00189.x

SECTION I

Theoretical Foundations/ Conceptions of Giftedness

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CHAPTER 1

The Differentiating Model of Giftedness and Talent

FRANÇOYS GAGNÉ

Everyone has encountered not only the terms *gifted* and *talented* in the course of their schooling, but also many gifted and/or talented people: teachers, friends, fellow students, and family members. Yet very few people have taken time to examine closely their beliefs about the nature of giftedness and talent. How would you distinguish, for instance, the term *gifted* from the term *talented*? What does the term *talent development* bring to your mind? How many people would you consider to be gifted and/or talented? What main ingredients contribute to the emergence of talents? These are some of the questions addressed in this chapter.

The answers will have their source in a conceptual framework called the Differentiating Model of Giftedness and Talent (DMGT; initially called "differentiated"). This well-known theory of talent development first appeared in the mid-1980s (Gagné, 1985) and has since continued to grow in breadth and complexity. This chapter will offer just a glimpse of that breadth, prepared with counselors' professional mandates in mind. Interested readers can find full coverage of the model's facets and dynamics in a recently published DMGT "bible" (Gagné, 2021).

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The DMGT's Differentiating Rationale

Within the field of gifted education, two key concepts designate its special population: *gifted* and *talented*. Those who browse through the field's professional literature soon discover that the existence of the two terms does not mean the existence of two distinct concepts. In fact, most authors use these two terms as synonyms, for instance, in the expression "the gifted and talented" often found in professional books and articles. When the two terms are differentiated, that distinction may take many forms. Some apply the term *gifted* to a mixture of high intelligence and high academic achievement, and the term *talented* to all other forms of excellence (e.g., arts, sports, technology); others consider giftedness to represent a higher level of excellence than talent (e.g., "she is just talented, not really gifted"). If all proposed definitions for these two terms were extracted from major publications in the field, there would easily be many more than a dozen. It would not be much of an exaggeration to associate the field's conceptual foundations with the biblical Tower of Babel (Gagné, 2021).

From Chaos to Twins

Although definitions abound and often contradict one another, scholars and professionals keep mentioning one particular distinction in almost every discussion of the giftedness construct. They distinguish, implicitly or explicitly, early emerging forms of giftedness with strong biological roots—what some call innate talent—from fully developed adult forms of giftedness. Scholars will express that distinction through pairs of terms like *potential* versus *realization*, *aptitude* versus *achievement*, or *promise* versus *fulfillment*. Here are two examples:

- "Talent development is important to achieving one's full potential" (Brody & Stanley, 2005, p. 28).
- "Being gifted means moving beyond potential to actual performance" (Cross & Coleman, 2005, p. 53).

This distinction is also at the heart of the field's definition of *underachievement*, namely "a discrepancy between expected performance (ability or potential) and actual performance (achievement) that cannot be explained by a learning disability" (Siegle & McCoach, 2013, p. 372).

The DMGT was created to take advantage of that fundamental distinction, as well as the availability of two closely related labels, giftedness and talent; it became the basis for the DMGT's following definitions of these two key concepts:

- *Giftedness* designates the possession and use of outstanding natural abilities, called aptitudes, in at least one ability domain, to a degree that places an individual at least among the top 10% of age peers.
- *Talent* designates the outstanding mastery of systematically developed abilities, called competencies (knowledge and skills), in at least one field of human activity to a degree that places an individual at least among the top 10% of age peers who are or have been active in that field.

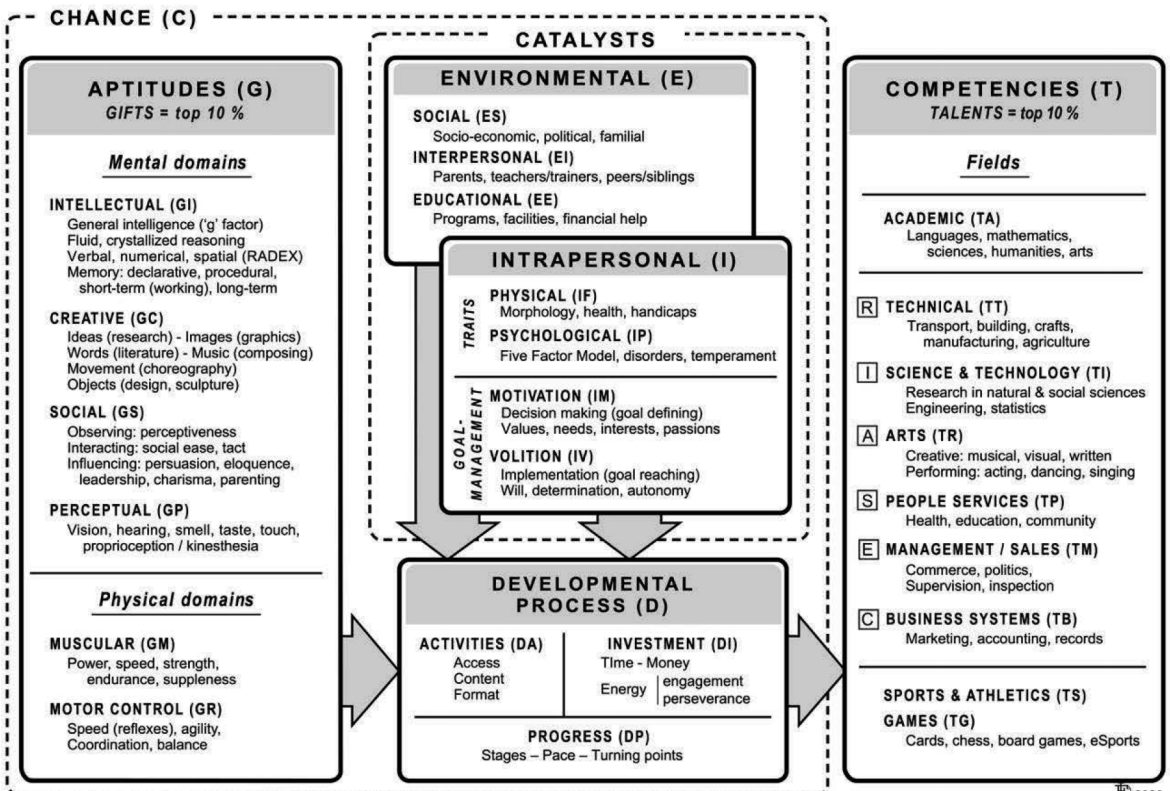
These definitions reveal that these concepts share two important characteristics: They both refer to human abilities, and they both target individuals who differ from the norm or average because of outstanding (top 10%) behaviors. These two commonalities help explain why so many people regularly confound them. Indeed, most dictionaries, even those specialized in the social sciences, define giftedness as talent, and vice versa. The clear separation of aptitudes from achievements makes the DMGT definitions unique through all fields of talent development. Figure 1.1 shows that gifts and talents represent the points of departure and arrival respectively of any talent development process; it also introduces the five major *components* of the DMGT, represented by the letters G, E, I, D, and T. Each component is subdivided into a number of *subcomponents* represented by two letters (e.g., GC, DA, IM, TC), with these being in turn subdivided into more specific *facets*. So, the DMGT is a hierarchical model of talent development. Please take time to examine this figure closely before proceeding; it is the map (or GPS) toward better memorizing.

Why "Top 10%"?

Both gifts and talents are outstanding behaviors, and the DMGT operationalizes the adjective *outstanding* with a top 10% threshold. Why choose that specific percentage instead of any other? The short answer is "why not?" Indeed, nowhere on the normal curve will there be a magic number that automatically separates the gifted or talented from the rest of the population. All thresholds encountered in daily life (e.g., speed limits, income tax brackets, poverty levels) result from a consensus among specialists. Unfortunately, no such consensus exists in the field of gifted education; for instance, the authors of a recent survey of 1,500 school districts in the United States noted, "the majority of district coordinators . . . reported that between 1% and 10% of the students in their districts were identified as gifted" (Callahan et al., 2017, p. 29). That range represents a tenfold gap between administrative decisions.

If there is no objective answer to the "how many" question, on what grounds did I choose 10% as my basic threshold? The technical answer is complex and

Figure 1.1 *Gagné's Differentiating Model of Giftedness and Talent (2020 Version)*



Note. 2020 version; see Gagné, 2021.

beyond this short overview (see Gagné, 2021). Some professionals will judge this choice unduly generous. In response, I point out that I counterbalance that basic threshold with four (formerly five) hierarchically structured levels; each level includes the top 10% (one decimal place) of the preceding one. Thus, within the top 10% of "ordinary" gifted or talented persons, I propose three progressively more selective subgroups, respectively labeled *highly* (top 1%), *exceptionally* (top 1:1,000), and *extremely* or *profoundly* (top 1:10,000). This hierarchical system, called MB (metric-based), applies to every giftedness domain and every talent field. Because giftedness domains are not closely related, it follows that the total number of gifted and talented individuals largely exceeds the 10% value. Some studies indicate that it might even be 2 or 3 times larger (Gagné, 2021).

According to the MB system, 90% of all gifted or talented individuals belong to the lowest level. As mentioned previously, the prevalence of individuals with *exceptional* giftedness in any given domain is approximately 1% *within* that specific population. Even full-time teachers of intellectually gifted students would encounter at best just a few of them in the course of their professional career. Consequently, professionals should be very careful not to use hyperbolic examples of precocity to describe gifted children or adults because educators and school administrators might conclude that caring for such a rare population does not require large resources.

Focus on These Heterozygous Twins

Giftedness (GI)

Some abilities are called "natural" because of their strong genetic roots. Yet, they are not innate; they do develop over the course of a person's life, but they do so naturally, mostly during the early part of life, thanks to biological maturation and daily use. Individual differences in natural abilities, called aptitudes in the DMGT, appear very early and keep expanding throughout childhood, creating what is commonly known as a fan spread effect (Gagné, 2021). Most children will manifest more or less average levels of these aptitudes, whereas a minority of them will either lag significantly behind developmentally or show precocious progress. It is this last group that the DMGT defines as "gifted" and designates empirically as the top 10% of their age group. Gifts in action can be seen more easily and directly in young children because systematic learning activities have barely begun transforming them into specific talents. Still, gifts will manifest themselves in older children and adults through the facility and speed with which they acquire new knowledge and skills. Within the DMGT framework, *ease and*

speed in learning are considered the trademarks of all gifts. Most researchers and educators acknowledge that some people enjoy such natural facility for learning, and even have specific expressions to describe it: "She is a natural . . .", "He's a born . . .", or "Either you have it or you don't." These expressions attribute to the person described some outstanding natural ability, something that didn't result from extensive training and practice—in other words, a gift.

The G component (see Figure 1.1) clusters natural abilities into six major *domains*: intellectual (GI), creative (GC), social (GS), perceptual (GP), muscular (GM), and motor control (GR). Natural abilities can be observed in most tasks children perform in their daily activities and school learning. Think, for instance, of the intellectual abilities needed to learn to read, speak a foreign language, or understand new mathematical concepts; think of the creative abilities involved in writing a short story, composing a song, drawing an attractive poster, or building with LEGO blocks. Notice also the social abilities children manifest in their daily interactions with classmates, teachers, and parents. Finally, physical natural abilities guide activities in the schoolyard, in neighborhood sports, or in the arts (e.g., dance, sculpture, crafts).

A Special Case: Intellectual Giftedness (G)

This handbook targets professionals working in K–12 schools; their "outstanding" population will be made mostly of intellectually gifted (GI) students. It is thus appropriate to define them more precisely. Unfortunately, the professional literature proposes a plethora of definitions for the concept of intelligence, and most of them extend its meaning well beyond its essential nature (e.g., successful, social, emotional). To better understand the distinction between "essence" and "extension," think of a pizza. The essence of a pizza is just three ingredients: dough, tomato sauce, and cheese; everything else is "frills." If this analogy is transferred to the concept of intelligence, one definition stands out. It was drafted by professor Linda Gottfredson and cosigned by 52 eminent scholars in cognitive psychology (Gottfredson, 1997). This text, *Mainstream Science on Intelligence* (MSOI), comprises 25 short paragraphs, or articles, that cover basic facts about the nature of intelligence, its measure, and its impact on academic and occupational success, as well as group and individual differences. The first article gives a definition of that construct—in my view the best available definition:

> 1. Intelligence is a very general mental capability that, among other things, involves the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly and learn from experience. It is not merely book learning, a narrow

> academic skill, or test-taking smarts. Rather, it reflects a broader and deeper capability for comprehending our surroundings—"catching on," "making sense" of things, or "figuring out" what to do. (Gottfredson, 1997, p. 13)

This definition highlights seven key ingredients; notice among them "easy and quick learning," the DMGT's behavioral marker of intellectual giftedness. The second article identifies the most relevant measures for their definition:

> 2. Intelligence, so defined, can be measured, and intelligence tests measure it well. They are among the most accurate (in technical terms, reliable and valid) of all psychological tests and assessments. They do not measure creativity, character, personality, or other important differences among individuals, nor are they intended to. (Gottfredson, 1997, p. 13)

That very important article highlights the key role of IQ tests and specifies the limits of this definition, or what it does *not* cover. For instance, intellectually gifted individuals are not necessarily highly creative, precociously mature, free of personality problems, or exceptionally wise. In short, what the MSOI definition of intelligence loses in extension it gains enormously in precision and clarity.

Talent (T)

The concept of talent describes the *outstanding outcome* of a systematic developmental process. Assessing the presence of talent is straightforward; just look for high-level competencies in a specific field. Talented athletes excel in their particular sport, talented musicians possess an outstanding mastery of their chosen instrument, and talented mechanics or electricians are among the top 10% in their trade thanks to their specialized knowledge and skills. In the case of school subjects, looking at the top academic grades will reveal talented students in math, language, science, or history. Talents can be observed more easily during the training phase because many occasions for assessment present themselves: teachers' exams, achievement tests, competitions, and so forth. Performance rankings usually disappear after individuals have completed their training; only professional athletes endure the constant stress of public performance comparisons.

How can one map the diversity of human talents? One of the best known category systems has its origin in Holland's (1997) work-related classification of personality types: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional (RIASEC). High school students commonly encounter that system

as they examine potential vocations with the World-of-Work map (ACT, 2009). To ensure comprehensive coverage, the DMGT adds three major non-RIASEC talent fields: academic subject matters, games, and sports (note the differentiated use of *domains* for aptitudes and *fields* for talents). Again, everyday language offers a diversity of expressions to describe talents: "He is an excellent . . .", "She has brilliantly achieved in . . .", "She is an expert in . . .", or "He is an eminent. . . ." Even the terms *prodigy* and *genius* refer directly to extraordinary talents, not gifts. The first one identifies extraordinary talent attained before adulthood in music, chess, graphic arts, and a few other fields. The other designates an older adult who "regardless of other characteristics he may possess or have attributed to him, produces, over a long period of time, a large body of work that has a significant influence on many persons for many years" (Albert, 1992, p. 64).

Note the lack of elitism in the DMGT's concept of talent; it is not reserved just for eminent individuals in elite professions (e.g., inventors, renowned artists or writers, Nobel prize winners). The DMGT defines the concept of talent in such a way that it ensures the presence of many top achievers in every human occupation. Moreover, it applies as soon as these individuals begin their talent development; one can speak of academically talented students as early as first grade as long as they manifest outstanding (top 10%) performances.

Are Most Gifted Individuals Also Talented?

The answer is "no." I will explain this counterintuitive answer by using the specific case of the close relationship between intelligence and academic achievement. To understand that closeness, one needs only examine any school curriculum; all of the competencies to be acquired involve a single domain, namely cognitive aptitudes. None of the other five domains, not even creative aptitudes (GC), contributes significantly to the explanation of individual differences in academic success. And science eloquently confirms this privileged link; countless studies (Mackintosh, 2011) have shown that individual differences in cognitive abilities predict academic performance far better than any other causal influence, for instance the intrapersonal or environmental catalysts discussed later in this chapter. For example, correlation coefficients between IQ scores and academic achievement in elementary school hover around 0.60; they decline at the high school level but still remain close to 0.50. That level of correlation is among the highest observed in the social sciences; do not expect to find similar values in other aptitude/achievement relationships.

This close relationship does not mean that all intellectually gifted (GI) young people almost automatically become academically talented (TA). Only a perfect correlation (r = 1.0) would produce a complete overlap of the two subgroups. If

one accepts the evidence of partial overlap—as the phenomenon of underachievement so clearly illustrates—is it possible to estimate with some precision, within a global population of GI *or* TA students, the proportion of GI students who will be simultaneously TA (I'll call them GITA), the only ones who rightly deserve the label "gifted and talented"? In order to make more tangible the following discussion, imagine a typical middle school with 1,000 students. According to the DMGT definitions, 100 of them (top 10%) will be labeled intellectually gifted (GI), with an equal number labeled academically talented (TA). So, there is a "virtual" population of 200 GI *or* TA students, some of them being simultaneously GITA (which somewhat reduces the virtual total of 200). Now the question can be stated as follows: How many of the "GI *or* TA" are "GI *and* TA" (GITA)?

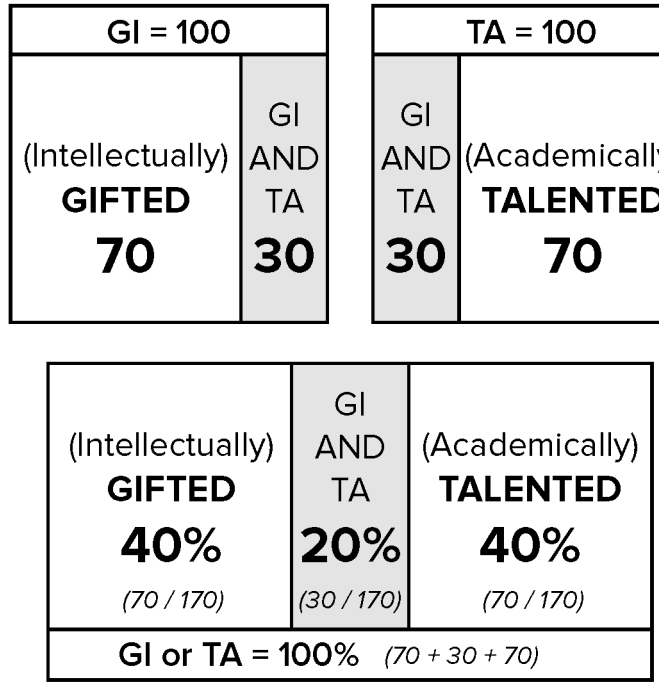
Bélanger and Gagné (2006) demonstrated mathematically that the answer requires that one quantify just three parameters: (1) the number of variables involved (here two, GI and TA), (2) the selection threshold for the target subgroup (here top 10%), and (3) the average correlation between the variables involved (here 0.5). Under these three conditions, only 30% of the intellectually gifted (GI) students will belong to the select GITA subgroup. Similarly, only 30% of the academically talented (TA) students will belong to the GI group. This leaves more than two thirds (70%) of the GI students "untalented," as well as 70% of the TA students "ungifted" (see Figure 1.2). Notice that the GI *or* TA population comprises 170 students instead of 200 (70 GI, 70 TA, and 30 GITA), which means that the 30 "gifted *and* talented" students count for only 20% of the "gifted *or* talented" population; that 20% represents the degree of overlap of the two populations—not a very sizeable proportion.

Of course, many of these "untalented" gifted students will still achieve above average academically, but they will not achieve high enough to earn the DMGT's label of "talented." With respect to talented students (TA), it also follows that the majority (7 out of 10) will have intellectual abilities *below* the giftedness threshold (top 10%), thus confirming that academic talent can easily emerge in the absence of intellectual giftedness (see Gagné, 2021, for a more detailed analysis). If one were looking for a clear proof of the need to differentiate the concepts of giftedness and talent, I consider this limited overlap very convincing.

The Emergence of Talent

The DMGT's differentiated definitions of giftedness and talent lead to a simple definition for the talent development process, namely the progressive transformation of gifts into talents. In other words, talent development starts with young people manifesting above-average aptitudes (in some cases, gifts), thanks

Figure 1.2 *Degree of Overlap Between Intellectual Giftedness and Academic Talent*



to which they will progressively build the outstanding competencies (the talents) that characterize a specific field of knowledge and skills (e.g., excelling in one or more subject matters, in the practice of a musical instrument, or in a particular sport). It is possible to analyze talent development more effectively by focusing on people who actively involve themselves in that process and try to reach outstanding performance goals. I realized that no proper term existed to identify such individuals, so I have adopted the term *talentee* for that precise purpose. Just keep reading; its practicality should soon become evident.

Mapping Talent Development (D)

The DMGT tries to bring order and structure to each of the major factors that contribute to the emergence of talent. In the case of the D component, the DMGT proposes three main subcomponents: activities, investment, and progress. The talent development *activities* (DA) include specific access procedures and a specific content, the curriculum, which is offered within a specific learning environment or format. The second subcomponent, *investment* (DI) has three distinct

facets, each targeting a different type of investment: *time* (DIT), *effort* (DIE), and money or *finances* (DIF). To observe these investments in action, just look at talent development with a long-term perspective, from initial access to maximal achievement, which shows enormous amounts of investment, not just in time (thousands of hours) and money (just ask the parents), but also in physical and psychological energy (e.g., intensity of effort, focus and concentration, Renzulli's [2005] task commitment, constant attention to details). Indeed, I consider that the DIE facet plays the most important role in transforming potentialities into achievements.

Finally, the *progress* (DP) of talentees can be examined from three distinct perspectives: (a) a series of *stages* (e.g., novice, advanced, proficient, expert), (b) a specific *pace* (slow or fast), and (c) the occurrence of crucial *turning points*. Pacing constitutes the main quantitative representation of progress. Talentees (as well as their teachers, trainers, and parents) can assess their developmental pace from both ipsative and normative perspectives. Ipsative assessment means self-centered comparisons (e.g., when trying to improve previous achievements or personal bests), whereas normative assessment, the most common approach, compares one's progress with that of peer talentees. Finally, crucial turning points frequently mark the long-term developmental course of talentees; these include being spotted by a teacher or coach, receiving an important scholarship, having an accident (especially in sports), and major positive (e.g., falling in love) or negative (e.g., death of a close relative) personal events that can exert a powerful impact on the developmental process.

Fostering Academic Talent Development (ATD)

I described in the preceding section the main subcomponents and facets of the talent development process as it is experienced by talentees; it represents the "what is" of that process. But the nine facets of that component say absolutely nothing about the "what should be" of that long travel toward excellence. When focusing on the specific case of K–12 academic talent development (ATD), how can school systems, from administrators to individual teachers, structure the learning environment to maximize the talentees' progress toward that academic excellence? I have proposed seven essential characteristics of a proper (DMGT-based, of course) ATD program: (a) an enriched curriculum; (b) full-time application of that curriculum; (c) ability grouping; (d) personalized, accelerated pacing; (e) clear and challenging excellence goals; (f) selective access criteria; and (g) early implementation (see Gagné, 2018).

The first two defining characteristics constitute the core of that program. Schools must offer to their academic talentees on a daily basis a fully enriched

academic curriculum that will cover all subject matters; it is the best (and only) way for students to experience constant learning challenges and thus progress academically. Vygotsky's (1978) concept of zone of proximal development aptly conveys the need to maintain the students' pace at the cutting edge of their high learning aptitudes: fast enough for them not to idle, yet not too fast to create feelings of helplessness. The third and fourth characteristics argue that such enriched (compacted, accelerated) instructional activities require grouping talentees with well-trained teachers who are attentive to individual learning pace differences *within* their group of talentees. There is overwhelming scientific support for all forms of accelerative enrichment (Assouline et al., 2015). The fifth and sixth characteristics focus on excellence both in access modalities and achievement goals. Finally, early implementation means that proper ATD programs can begin as early as kindergarten.

Few schools and school districts currently offer to their bright achievers anything close to a real ATD program, except at the high school level (e.g., honors programs, selective high schools, residential state schools). It is rare to observe full-time ability grouping of academically talented students coupled with systematic curriculum enrichment in elementary and middle schools. Much remains to be done to properly answer the special educational needs of these academically talented (TA) students, whom DMGT-based ATD programs specifically target.

Catalysts as Supporting Cast

You might recall from your high school chemistry course that the concept of catalyst refers to chemical elements directly involved in a chemical reaction between two or more ingredients acting as facilitators of the reaction. In the case of talent development, the key ingredients are the gifted inputs—acting as building materials—and their talented outcomes. The DMGT distinguishes two major types of catalysts: characteristics that belong to the talentees themselves (intrapersonal) and characteristics that belong to the talentees' environment.

Intrapersonal Catalysts (I)

Within the I component, relatively stable physical and mental *traits* occupy the top part of that block (see Figure 1.1), whereas more mobile and flexible *goal management* processes occupy the bottom part. Take a closer look at the top part first. Physical (IF) traits include general appearance, ethnic traits, disabilities (think of the Paralympic Games), chronic illnesses, and so forth. Mental (IP) characteristics cluster around two major constructs, temperament and personal-

ity, which correspond to the nature and nurture poles respectively, or to basic predispositions as opposed to behavioral styles. Although personality traits come in hundreds of verbal "flavors" in the scientific literature, the Five-Factor Model (FFM) represents the current consensus among specialists on the five most general personality groupings (in decreasing importance): *Neuroticism* (vs. emotional stability), *Extraversion* (vs. introversion), *Openness* (curiosity), *Agreeableness* (vs. antagonism), and *Conscientiousness* (vs. impulsivity). Research has shown only minor differences between GI (and/or TA students) and their average peers on FFM factors, mostly in favor of GI/TA students (Gagné, 2021). For instance, Zeidner & Shani-Zinovich (2011) summarized their comparative study of gifted/talented and nongifted Israeli high school students as follows: "[Our] empirical data are consistent with recent research suggesting that when gifted students are compared with nongifted students on various socio-emotional and personality characteristics, the results are not unfavorable to gifted students" (p. 566). Similar comments can be found in most chapters of Neihart et al. (2016).

The bottom section of component I (see Figure 1.1), devoted to goal management activities, includes two subcomponents: *motivation* (IM), and *volition* (IV). The distinction between goal identification activities (IM) as opposed to goal attainment activities (IV) has its origin in Action Control Theory (ACT), a motivational theory developed by two German scholars and popularized in the United States mainly by Lyn Corno (1993). In a nutshell, motivation is a *pre*-decisional process used by talentees to pinpoint their chosen excellence goal(s); they will examine their values and needs, identify their key interests, or let themselves be swept up by a passion. For its part, volition is a *post*-decisional process that brings together all of the personal qualities needed (e.g., grit, determination, resilience) to maximize the chances of reaching the chosen goal(s). The IV subcomponent is closely related to the facet DIE (investment in energy) mentioned previously; the loftier the goal, the more obstacles that talentees risk encountering in their efforts (DIE) to reach it (see Gagné, 2021, for a detailed discussion).

Environmental Catalysts (E)

The environmental catalysts (E) appear partly hidden by the intrapersonal catalysts in Figure 1.1; that partial overlap signals that talentees constantly evaluate the relevance of proposed environmental influences with respect to their talent development course. As the saying goes, "You can bring your horse to the trough, but you can't force it to drink." Pursuing the DMGT's structuring role, the E component comprises three subcomponents. The first one, *social* (ES), operates both at distant (e.g., geographic, cultural, sociological) and proximate levels (e.g., parental socioeconomic status, local school structures). The second subcompo-

nent, *interpersonal* (EI), covers the psychological influences of significant persons in the talentees' environment. It includes, of course, parents and siblings, but also the broader family, teachers and trainers, peers, mentors, and even public figures whom talentees adopt as role models. It is certainly easier to imagine the significant impact of interpersonal influences than that of all other environmental sources of influence. Thus, it is no surprise that a significant proportion of the professional literature in all talent development fields (e.g., academics, arts, business, sports) gives prominent importance to the study of significant individuals' influence on the talentees' progress. The third subcomponent, *educational* (EE), covers all forms of talent development resources, for instance public and private training programs, facilities (e.g., gyms, special schools, conservatoires), public or private financial support, and so forth. In the case of academic talent development (ATD), the two traditional facets of curricular enrichment and administrative provisions (e.g., ability grouping, acceleration between grades) parallel the content and format facets earlier described as part of the *activities* (DA) subcomponent.

About Chance (C)

The contribution of chance, both as bad luck and good luck, within the DMGT has evolved considerably over the last 2 decades (Gagné, 2021). It now expresses the degree of *control*, large or small, that talentees possess over the various influences affecting their talent development. Talentees do have some control over the goals they choose to pursue, the talent development activities they adopt, and the intensity of their investment in them. But there are many important influences over which talentees have strictly no control. The renowned psychologist John William Atkinson (1978) once stated that all human accomplishments could be ascribed to two crucial "rolls of the dice" over which no individual exerts any personal control: the accidents of birth and background. Indeed, individuals do not control their genetic endowment, yet it strongly affects their natural abilities (the G component), as well as most facets within the I component. Moreover, individuals do not choose their parents, who bring with them a specific socioeconomic and cultural environment, as well as a distinct parenting style. These two impacts alone give chance a powerful role in establishing the foundations of a person's talent development possibilities. Because of its redefined role, chance appears in Figure 1.1 as a virtual fence enclosing the four components under its influence.

The Dynamics of Talent Development

Some critics argue that the DMGT does not propose person-oriented goals, like self-realization, emotional maturity, wisdom, or social sensitivity; it is, in their view, too much about doing and not enough about being (Gagné, 2021). I respond that they are asking too much from a theory whose *raison d'être* is "just" talent development. If the goal is to explain the emergence of talents, then the DMGT must focus "just" on talents as its dependent variable; other developmental goals become irrelevant. It does not mean that I do not approve of the parallel person-oriented goals, but they cannot appear as DMGT goals because they depend on a different set of causal influences. As the saying goes, "grasp all, lose all." To understand the growth of excellence in these person-oriented goals, one needs another explanatory system, different from the DMGT; I have outlined the main components of such a parallel model, called the Developmental Model of Psychological Maturity (DMPM; see Gagné, 2021).

Basic Dynamic Rules

Now that I have circumscribed the appropriate focus for the DMGT, I will outline some basic dynamic rules of talent development inspired by this theory:

- Outstanding natural abilities, or aptitudes, act as the raw materials—the building blocks or constituent elements—of talents. It follows that talent necessarily implies the presence of above-average, although not necessarily top 10%, natural abilities. But the reverse is not true because many underachieving individuals do not transform their high natural abilities into talents. The DMGT offers a unique way to clearly define underachievement: giftedness without talent.
- Sometimes, the other causal factors (D, I, E) can *partially* compensate for lower natural abilities. For instance, some students with barely above-average natural intellectual abilities may reach the bottom rung of the MB system of levels (basic academic talent) thanks to intense dedication and effort (IV), long hours of study (DI), and continuous support from both parents and teachers (EI). But as higher levels of talent are sought, reaching them will require at least gifted-level aptitudes.
- Unfortunately, the opposite situation in much more frequently observed, namely academically talented students who need little more than their high natural intellectual gifts to achieve brilliantly. Most of them show limited intrinsic motivation, need little environmental support, and invest minimal time in their schooling beyond presence in the classroom and

occasional last-minute cramming. Here are students who, because of a learning environment that offers no significant intellectual challenges, "surf" on their intellectual gifts.

- There is a dynamic association between specific gifts and talents, such as the association between physical abilities and sports, between creativity and art, or between social abilities and professions like teaching, politics, and school counseling. These self-evident pairings between G and T subcomponents do not mean that other outstanding natural abilities cannot also contribute to the growth of these talents.
- Despite these evident pairings, keep in mind that gifts represent generic abilities that can be molded into quite distinct skills. For example, manual dexterity can be molded into the particular skills of a musician, a dentist, a player of video games, or an illusionist. Similarly, analytical reasoning, a crucial cognitive natural ability, can be molded into the scientific reasoning of a chemist, the game analysis of a chess player, or the strategic planning of a football quarterback.
- In every talent development situation, each of the four causal components (G, I, D, E) contributes positively to the emergence of talents. These contributions can vary a lot in intensity and continuity (a) from one talentee to another, (b) from one field of talent to another, or (c) from one developmental phase to the next. All of them always play some significant role. So, beware of explaining a talentee's difficulties with just one cause: "He doesn't study enough," "She is too anxious," "His parents are not strict enough," and so forth. Most situations involve all four components in much more complex ways.
- No two developmental paths look alike. Even when two identical twins become academically talented, the causal forces within and around them will have impacted them in somewhat distinct ways. It can also happen sometimes that only one in the pair will reach academic excellence, confirming that genetic identity does not ensure behavioral identity.

What Makes a Difference?

The DMGT offers a very complex and comprehensive picture of the talent development process. Recall its three-level hierarchic structure, from components to subcomponents, and then to more specific *facets*. This complexity strongly suggests unique individual pathways to excellence and expertise. As I keep repeating at the end of my conference presentations: *Talents result from complex individual choreographies involving a multitude of fluctuating interactions between all components, subcomponents, and facets of the DMGT.*

Yet specialists keep asking themselves, "What makes a difference?" Which among these factors have—on average, of course—a more significant impact on the emergence of talent? Is it outstanding natural abilities, passion for a particular field of talent, indomitable willpower, or indefectible parental support? Said differently, can specialists create a hierarchy of the four *causal* components (D-E-G-I) in terms of their relative influence on the growth of talents? Among the 24 logical arrangements (DEGI, DEIG, DGEI, etc.), I have proposed (Gagné, 2021) to give top rank to aptitudes (G) because of their crucial role as building blocks of the high competencies that define talents. This decision reduced my arrangement possibilities to only six. Because component I will always precede component E (recall the horse and the trough), the only decision left to me was whether to have component D precede or follow the IE pair (GDIE or GIED). Considering that both sets of catalysts exert their influence through the Investment subcomponent, especially DIE (effort), I gave them causal priority; therefore, the appropriate causal hierarchy should be GIED.

What happens, then, to the Chance factor? Even though all components have significant zones of noncontrol, two of them (G and I) are more directly and irremediably affected by chance because of their genetic underpinnings, and they occupy the first two ranks in the hierarchy, which reinforces the causal role of chance. If one introduces a second "throw of the dice," namely the unchosen family environment in which talentees are raised, it ensures the ubiquity of chance at all stages of talent development. In order to clearly signal that key role, I decided to represent the hierarchy of causal influences with the following equation:

C.GIED

The decimal point acts here as a multiplying symbol, confirming its impact on all of the factors contributing to the emergence of talents. In other words, talent development takes place inside the huge casino of life.

Professional Usefulness

What does the DMGT have to offer school counselors who face academically talented (TA) or underachieving intellectually gifted (GI) students in the course of their professional activities? Here are a few suggestions.

Conceptual Usefulness

- The DMGT offers a *theoretically logical* and, at the same time, *intuitively meaningful* framework for understanding the phenomena of giftedness, talent, talent development, and gifted underachievement. One of my proudest accomplishments is the recurring testimony from hundreds of professionals, teachers, and parents who, after discovering the DMGT, react spontaneously with the following acknowledgement: "It makes so much sense."
- The DMGT offers both *breadth* and *comprehensiveness* with its four major causal components, each clearly structured into subcomponents and even more specific facets. No significant causal influence escapes that wide net.
- The DMGT revalorizes the concept of talent, giving it powerful meaning as the sought-after outcome of talentees' efforts toward academic excellence.
- The DMGT alone includes in its definitions of giftedness and talent a concrete prevalence estimate (top 10%) that applies equally well to all giftedness domains and all talent fields.
- Through its Academic Talent Development (ATD) model, the DMGT proposes a scientifically grounded approach to meet the educational needs of bright achievers.

Practical Usefulness

- School counselors could keep the DMGT figure close by and use it as their causal map when thinking about the possible sources of a student's problems.
- They could adopt the label *academically talented* as a substitute for *gifted* and promote its regular use in their school. It implies underlying giftedness but focuses on achievement instead of potential; it also generates fewer negative reactions.
- They could promote the DMGT's MB system of prevalence estimates; thus, more students would be recognized as (academically) talented or (intellectually) gifted. They could also use the four MB levels to better pinpoint the relevant giftedness or talent levels.
- School counselors could use the ATD model of enrichment as a guide to plan new and more relevant talent development provisions in their school.
- They could use the DMGT to help identify gifts in nonintellectual domains and could then guide students toward activities that foster relevant talents.

- They could use (and promote) the DMGT as a useful tool to analyze individual situations and prepare case studies (see Gagné, 2021, Chapters 10 and 11).
- They could use the DMGT figure as a frame of reference when discussing student problems or vocational issues with colleagues, teachers, parents, and even the students themselves. Anyone can understand, in a matter of minutes, the basic concepts and structure of the theory.

There are certainly many more conceptual and practical uses for the DMGT in a school counselor's professional life. I am convinced that with enough interest and creativity, many more items will be added to this list.

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CHAPTER 2

Serving Gifted Students: A Talent Development Perspective

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Counselors have two broad roles in working with students, teachers, and families. They are trained to respond to and support students who are experiencing social-emotional distress, a role that is frequently activated in times of crises, which can be personal, school-related, or community-related. Additionally, counselors are called upon to provide guidance and support when students are striving to achieve a personal goal. In this second role, the goal is to promote optimal performance rather than to mitigate distress. Although we discuss both of these roles in this chapter, it is this second role that will be the primary focus. We begin by providing a brief overview of the Talent Development Megamodel (TDMM; Subotnik et al., 2011, 2012, 2018), highlighting the aspects of the model that most closely relate to the role that counselors can play in working with gifted and talented students. Then, we discuss the counselor's role in providing supports in line with the model, as well as suggestions that help to contextualize this role.

The Talent Development Megamodel

Subotnik et al. introduced the Talent Development Megamodel to the literature in 2011. The TDMM synthesizes the major theoretical frameworks of giftedness and talent development in the literature, bringing together and integrating

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cognitive, developmental, and psychosocial elements that have been highlighted in other models (Worrell, Subotnik, Olszewski-Kubilius, & Dixson, 2019). Major premises of the TDMM include the following:

1. The TDMM acknowledges the role of general cognitive ability or IQ as an indicator of potential, particularly for the academic domains, and its role in predicting performance in academic and life contexts across the lifespan (Brody, 1997; Neisser et al., 1996; Nisbett et al., 2012; Terman & Oden, 1959; Wai et al., 2018). The TDMM also recognizes that there are general ability factors that are more domain-specific (e.g., musicality) and that these factors also need to be examined in talent development research.
2. The TDMM also highlights the role of domain-specific abilities (Olszewski-Kubilius, Subotnik, & Worrell, 2017a, 2017b). Even in the academic domains where general ability is a strong predictor of performance, domain-specific abilities (e.g., mathematical reasoning, spatial ability, verbal facility) play an important role in predicting performance (Bernstein et al., 2019; Makel et al., 2016), and these domain-specific abilities assist in determining the subdomains that an individual might be particularly good at or successful in (Lubinski, 2010, 2016).
3. The TDMM recognizes that talent development is an ongoing, developmental process (Simonton, 1999). Beginning with potential in childhood, adolescence, or early adulthood depending on the domain, potential talent is cultivated, leading to competence and expertise (Simonton, 1991; Wai et al., 2010), and in some cases to eminence (Olszewski-Kubilius et al., 2016; Worrell et al., 2018). Traditional K–12 schooling is typically involved in moving students from potential to competence, especially in the academic domains, and sometimes to expertise.
4. Moving talent from potential to competence and beyond requires appropriate teaching or coaching (Simonton, 1992), as well as domain-specific opportunities and appropriate challenges to hone talent (Bernstein et al., 2019). It is important that students take up opportunities presented to them to help them move forward.
5. Talent development is facilitated by combining out-of-school (e.g., summer programs, programs at universities) and real-world (e.g., apprenticeships, internships) opportunities with in-school programming.
6. Psychosocial factors and dispositional traits, such as motivation, persistence in the face of failure, and teachability, among others, are critical in supporting the translation of potential and abilities into developed talent via opportunities and appropriate instruction and change in importance and manifestation over time (Olszewski-Kubilius et al., 2015a, 2015c; Simonton, 2013).

7. The TDMM assumes that individuals with potential and developed talents differ from their peers in the capacity for outstanding performance in their talent domain (Bergold et al., 2020). In other ways, they are similar to their peers (e.g., self-doubts, fear of failure, decreased motivation after setbacks). The difference between identified students and their nonidentified peers is that gifted and talented students may be, or feel that they are, under greater and more public pressure, given their goals and expectations of others (Holahan, 2020).
8. Being gifted and talented does not predict psychological concerns either in the short or long term (Holahan, 2020; Lubinski et al., 2014; Terman, 1925). Moreover, although some gifted and talented students may experience serious social-emotional distress, this group is no more likely to experience these issues than their peers; when they do experience these issues, it is important to determine *if* these matters are related to being gifted rather than assuming that they are.
9. Finally, the TDMM assumes that the movement from potential to expertise becomes increasingly self-directed over time (Subotnik & Jarvin, 2005; Subotnik et al., 2009). Although parents and teachers may be the critical sources of motivation as students move from potential to competence, the primary source of motivation from competence to expertise needs to come from the student. High achievement is more likely to co-occur with socioemotional well-being when the decision to strive to be among the best is from the individual and not from an outside source.

These underlying premises of the TDMM set the stage for the role of counselors in working with gifted and talented students. We now turn to issues that counselors can help students with from early identification through high school graduation, using the levels of performance and the movement from a lower level to a higher level to frame the rest of the chapter. In each section, we highlight the issues that are important and the potential roles that counselors might play.

The Role of the Counselor

The role of the counselor will differ depending on a student's level or stage in a talent domain trajectory (Olszewski-Kubilius et al., 2015b, 2019). Has the student been identified formally, or is the student in the process of being identified? What role does the counselor play with regard to identification and programming for students who are identified? Is the counselor involved in identifying opportunities for gifted students both within school and beyond the school? At

the high school level, what role does the counselor have in helping students plan their academic program, including preparing for higher education? As these questions make clear, counselors will be called upon to play roles such as advocates, gatekeepers, consultants, and boosters, depending on the student's talent development stage and the official duties the counselor has in a particular school or district. An important assumption here is that the counselor has taken coursework in gifted education and is familiar with models of gifted education and how this type of education is conducted in schools, or at the very least is interested in gifted and talented students and willing to become familiar with the extant literature on this group of students. Further, middle and high school counselors need to become familiar with community resources where talent development can be reinforced in various domains, such as clubs, programs, museums, and mentorships.

Identifying Students for Gifted Programming

In the context of early schooling, the first hurdle to be overcome is that of identification for gifted programming. At this stage, the counselor may be an advocate, a gatekeeper, or both. Schools use a variety of criteria to identify students, including tests of cognitive ability, standardized achievement test scores and other achievement data, teacher nominations, portfolios, and rating scales on variables such as motivation and creativity completed by teachers and parents (National Association for Gifted Children [NAGC] & Council of State Directors of Programs for the Gifted, 2020; Worrell & Erwin, 2011). Identification also typically takes place in the primary grades. Given the pervasive achievement gaps in society (Erwin & Worrell, 2012; McFarland et al., 2018; Morgan et al., 2016), students with well-developed skills are the ones who are typically identified. As a result, these students are more likely to come from middle- and upper-income households with college-educated parents, perpetuating the Matthew effect (Ceci & Papierno, 2005).

At the preidentification phase, counselors can play an important advocacy role by providing information and literature on best practices in gifted identification (e.g., Johnsen, 2018; McBee et al., 2014, 2016; NAGC, 2019a; Worrell & Erwin, 2011). Counselors can highlight several important principles to help inform identification in their schools and districts:

- **Remind colleagues about definitions of giftedness.** As noted in the TDMM (Subotnik et al., 2011), identification for gifted programs should focus on finding potential in addition to well-developed talents. Moreover, identification procedures need to take into consideration the fact that students with potential come from all socioeconomic and ethnic-racial backgrounds (NAGC, 2019b) and have different profiles of abilities. In

other words, students may be extraordinarily able in one subject and not in others.

- **Describe the benefits of universal screening.** As early identification is intended to find potential, criteria for identification should be broad and multifaceted to allow for the identification of students who have potential but have had limited opportunities to develop that potential. Conducting universal screening is one way to facilitate identifying potential, as no children are excluded from consideration early in the process (Dixson et al., 2020).
- **Highlight the utility of local norms.** Recognizing that universal screening is expensive and may be beyond the budgets of many schools and districts, using local norms—that is, building-based norms—for identification instead of national norms is one alternative that allows students to be identified on the basis of their performance relative to students at the same school site (Lohman, 2005; Peters & Gentry, 2012). The use of local norms also allows for a gifted program at every school site. Project Excite (Olszewski-Kubilius & Steenbergen-Hu, 2017; Olszewski-Kubilius, Steenbergen-Hu, et al., 2017) provides an example of the use of local norms for supplemental programming. This should also be the case in evaluating achievement in individual subjects.
- **Support the use of multiple criteria for identification.** Some districts rely almost exclusively on IQ tests for identification. Apart from the fact that use of a single score for important decision making is not best practice (Worrell, 2009), use of only IQ ignores the importance of domain-specific knowledge and privileges students from more advantaged backgrounds.
- **Encourage the identification of students who will benefit from enrichment as well as acceleration.** School personnel frequently assume that because gifted identification is a binary decision, all gifted students are alike. However, just as there is a wide range of functioning in students in general education, there is also a wide range of functioning in students identified as gifted (Kanevsky, 2015). *Always remember that giftedness is a classification decision and not a trait.* There are some gifted students who will benefit from acceleration in one or more subjects; there are others who will benefit from more intensive study of grade-level material, especially students from underrepresented backgrounds who have had fewer opportunities to develop their talents. Students in both of these groups need to be identified and served, with the type of programming based on the data collected as part of the identification process. A range of services is needed in every school, not just housed in a single gifted program in a few schools.

- **Support identification processes from elementary through high school.** Gifted performance is the result of an interaction of individual potential and environmental circumstances (Subotnik et al., 2019a). For students identified in elementary school, that interaction has begun. However, potential may not emerge or may not be visible in some domains until students are older, and newly introduced subjects provide the opportunity for potential to be seen (Simonton, 1999, 2005). Thus, it is important to allow for gifted identification into the high school years, when subjects such as psychology, biochemistry, and robotics are introduced for the first time.

Even in the early stages of talent development—be that in elementary, middle, or high school, depending on the domain—it is important that children and adolescents see the education system as inviting and full of opportunities to learn. Talent development is built upon student interest, engagement, and curiosity coming into contact with supportive educators and appropriate contexts. Counselors have an important role to play as advocates in the identification process, so that gatekeepers and gatekeeping processes do not derail students with promise and potential before they even start down the talent development path (Knotek et al., 2020).

Serving Students in Gifted and Talented Programs

Once students have been identified and are formally in a gifted program or a program for youth who have the potential for high achievement, the role of the counselor as a source of support can become increasingly important. Students in gifted programs are in a more selective environment with a more selective group of peers, which can result in the big-fish-little-pond effect for some (Marsh & Hau, 2003). Students with well-developed talents who are accustomed to receiving the highest grades or being ranked in the top three may find that there are others in the program who are as competent as they are or even better. Students who were selected on the basis of potential, but who have not had many opportunities to participate in selective programs, may also feel out of their depth. Support from the counselor and formal and informal training on psychosocial enhancers will help these students in their transition to this more academically demanding environment. Table 2.1 contains some suggestions for counselors as they work with students moving from potential to competence and from competence to expertise. As can be seen in the table, it may be important for counselors to also support teachers and parents. These issues are discussed in the following sections.

Table 2.1
Ways in Which Counselors Can Support Psychosocial Skills Across Talent Development Stages

Stage of Talent Development	Counselor's Role
Transforming Potential Into Competence	**Help students to:** • Be teachable (open to instruction and feedback). • Adopt a growth mindset. • Learn to delay gratification. • Deal with failures and setbacks. • Work well both alone and with others. **Help teachers and parents to:** • Support the students' emerging identity in the domain. • Reinforce the students' interest and enthusiasm. • Encourage teachability. • Seek out talent development opportunities. • Reinforce a growth mindset and persistence.
Transforming Competence Into Expertise	**Help students to:** • Develop their emotion regulation. • Deal with competition and setbacks. • Seek out feedback and critique. • Take more responsibility for their own talent development, identifying weaknesses and building on strengths. • Manage affiliation-achievement conflicts. • Engage in appropriate risk-taking. • Resist negative peer pressure and ignore negative stereotypes. • Enhance adaptive and decrease maladaptive perfectionism. **Help teachers and parents to:** • Be supportive but not overly controlling. • Allow students to develop their voice, and appropriately challenge advice about their creative ideas. • Transfer responsibility for assessment of strengths and weakness more to students. • Provide explicit instruction and sharing of tacit knowledge about the domain. • Help students juggle competing priorities.

From Potential to Competence. As students move from potential to competence, they need to devote more time to deliberate learning, study, and practice

in their area of talent. Successfully making this transition is dependent on several factors. First, *students need to be teachable*—they must be open to instruction and feedback as they work on acquiring foundational skills and competencies in the talent domain. Necessarily, more time spent on talent development leaves less time for socializing and other leisure activities. Extrinsic reinforcers may need to be used judiciously and in a way that supports growing competence, thus facilitating rather than undermining intrinsic motivation. Counselors can work with teachers and parents in developing reinforcement schedules, and with students to help them recognize their increasing competence, which is not always evident in production domains (Subotnik et al., 2011).

A second concern in the transition from potential to competence is *the increase in personal responsibility* that must occur in this phase (Subotnik & Jarvin, 2005; Subotnik et al., 2009). As students increase in competence, there needs to be a concomitant increase in autonomy and self-governance in the domain. Students must be supported in this process by learning to catalogue their areas of relative strengths and weaknesses. For example, a mathematically talented youth who is not sufficiently facile with applying formulae for word problems may need to engage in deliberate practice in that area. Similarly, a budding writer who has not traveled beyond the city in which they live may benefit from reading the work of writers who are masters at bringing a context to life with their words. Although addressing this issue may fall under the direct purview of subject-matter teachers, counselors have a role to play in consulting with these teachers (Dixson et al., 2020), especially if the teachers are not familiar with gifted pedagogy. Indeed, the counselor may need to advocate for keeping the student in the gifted program if teachers and parents are not knowledgeable about asynchronous skill development.

Related to the issue of engaging with and overcoming one's weakness is a third concern that involves the concept of *mindset*. Popularized by Dweck (2006/2016), mindset refers to whether one perceives abilities as malleable or fixed. If abilities are fixed, then hard work and effort are not particularly useful, as one is either smart or not smart. However, if abilities are malleable (i.e., a growth mindset), hard work and effort are useful, as are persistence and changes in tactics after failure. Although the literature has yielded mixed support for mindsets as a general academic intervention (Sisk et al., 2018), the belief that competence and abilities can be increased is crucial for outstanding performance (Worrell, Olszewski-Kubilius, & Subotnik, 2019). Helping students and their parents and teachers adopt a growth mindset is an important role that the counselor can play.

As students move from potential to competence, their growth will inevitably involve perceived setbacks and failures, both of which have the potential to undermine confidence and push the student off the talent development path. Students

need to learn to *delay gratification* in support of longer term goals. Counselors can help students to frame these issues as challenges to confront rather than obstacles that cannot be overcome. Counselors can have ongoing support groups of talented students that are focused on promotion of talent development long before students meet these challenges. These types of groups can be used to (a) prepare students for the setbacks before they occur, (b) provide supportive relationships on which students can depend when challenges arise, and (c) help students develop their sense of agency and consider multiple and alternative pathways to their goals. Students developing a personal identity in a talent domain will need support from others, including peers with similar experiences and interests.

From Competence to Expertise. As competent students begin the journey to expertise, all of the issues in the previous section continue to be of concern. Learning from feedback and experience and persisting in the face of failure are ongoing issues in the development of talent. Moreover, an additional set of issues increase in importance (see Table 2.1). Students are no longer novices in the domain. They have a certain level of competence, and the work of this stage is to become increasingly specialized in the subject matter and socialized into the culture of the field. Work in the domain requires an even greater commitment of time, once again raising conflicts between commitment to growing expertise and engaging in social and other activities with friends and family, issues in which counselors may need to intervene. In the academic domains, counselors in middle and high schools also serve as gatekeepers. Students depend on them for advice with regard to advanced opportunities and class selection (e.g., honors classes, Advanced Placement, International Baccalaureate). Inadequate counseling is related to high school seniors from lower income backgrounds undermatching with regard to colleges they attend (Giancola & Kahlenberg, 2016). As in the previous stage, there are also several interrelated additional issues for parents and teachers that counselors may need to get involved in.

An issue that surfaces more often at this stage is *dealing with competition*. Although competitions are often thought of in the domains of athletics and the performing arts, there are also competitions in a variety of academic domains. Olympiads and science fairs at the school, district, state, and national levels play an increasing role in students' lives. There are also competitions for scholarships, fellowships, and internships, as well as for spots working with a particular teacher or getting one's work published or exhibited. Students need to learn how to prepare for competition, how to respond appropriately when they win and when they do not, and how to focus on self-improvement and beating their personal best instead of "crushing" an opponent. An important lesson is learning about constructive versus destructive forms of competition (Fülöp, 2009; Worrell et al., 2016). Constructive competition can be described as employing "yardsticks or

diagnoses for improvement that help youth celebrate their commitment to working toward their highest potential" (Worrell et al., 2016, p. 267).

Students transitioning to expertise need to begin to *seek out opportunities where they will receive critical feedback* from individuals who are already experts. Competitions represent one way of receiving feedback, but there are other opportunities that involve performing or presenting in public where the stakes are not as high. For example, a budding writer can submit an op-ed to a newspaper or a poem or short story for publication consideration in a magazine, depending on the type of writing that they are developing. An aspiring pianist can apply for a holiday job playing a public venue, and a budding actor can audition for a community theater group and not just participate in the school play. All of these decisions involve *risk-taking*, but risk-taking is a necessary step on the path to expertise. Individuals cannot become experts without engaging in and receiving feedback from experts on tasks that experts do. The role of the counselor in this phase involves providing support and reinforcing psychosocial skills (persistence, considering alternative pathways) when risk-taking does not result in a favorable outcome (e.g., the performer gets a bad review, or the writer's article is rejected by several publication outlets). The counselor will also need to work with teachers and parents who want to protect the student from experiencing failure to allow the student to take risks strategically.

However, the counselor is also needed when a student experiences substantial success. Students who are successful can encounter significant intellectual and psychological tensions (Ochse, 1990; Olszewski-Kubilius, 2000) at this stage of talent development. They may "outgrow" their current teacher or need to ignore the advice of their parents, who are the individuals upon whom they have depended until now. Their success may also place them ahead of peers in the field with whom they have practiced and grown together for many years, leading to feelings of ambivalence about their success. Some may have to deal with resentment from peers who are not making as much progress; others may become complacent with their skills. In short, talented individuals who progress to this stage have to learn to deal with the pressures inherent in reaching higher levels of achievement; they need to learn to manage the changing relationships with mentors and teachers and find an optimal level of psychological independence. They also need to manage the pressure of increased expectations for productivity in the field: *I was successful yesterday, but what do I have to do to be successful tomorrow and even better than I was yesterday?*

Conclusion

Counselors have an important role to play in the talent development journeys of gifted children and adolescents. They ought to understand the interaction of the psychological, social, and sociocultural issues that students are facing and how these issues play out in strong performances as well as underachievement. They can be advocates for students with teachers, parents, schools, and districts, and available for social-emotional support as well. Counselors need to be conduits to appropriate opportunities in the community and to colleges and universities where students can further develop their budding expertise. Counselors can also provide direct support in the form of workshops on a variety of topics (e.g., coping with anxiety and stress) to help gifted children acquire the psychosocial skills that support their talent development.

The TDMM is a comprehensive model of talent development for youth that identifies both enhancers and delimiters of talent. Although it is often assumed that gifted children do not need special programming and will succeed if they are left to evolve on their own, the TDMM makes clear that the journey to outstanding performance is long and convoluted, and children and youth cannot negotiate this path without assistance (Subotnik et al., 2019b) in (a) finding opportunities that will develop their abilities, (b) maintaining commitment, (c) experiencing the optimal level of challenge and support, (d) developing resiliency and coping skills, and (e) acquiring the psychosocial skills needed to choose and stay on a road that may be filled with pitfalls and the potential for fulfillment. Counselors are among the personnel who are key in providing assistance to this group of students, and counselors are sometimes the only ones in the school on whom these students can depend.

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CHAPTER 3

Talent Development: From Theoretical Conceptions to Practical Applications

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INTRODUCTION

Talent development is described as the nurturing of ability or giftedness in one or more specific fields with intentionality (Olszewski-Kubilius & Thomson, 2015). Contemporary thoughts extend the conception of talent development to include the eventual transformation of ability into eminence within designated fields in adulthood (Dai, 2010, 2020; Subotnik & Rickoff, 2010; Worrell et al., 2012). In fact, one of the founding members of the field emphasized the significance of expert teachers, mentors, and coaches supporting talent development (Bloom, 1985). Further, the talent development paradigm places greater focus on the development of emergent talent or potential versus only that realized (Olszewski-Kubilius & Thomson, 2015). Resultant implications for educational programming embrace the notion that potential versus achievement leads to inclusivity in addressing the needs of a wider group of students and that talent exists in areas other than school-related achievement (Subotnik et al., 2011).

Talent development has long been one of the primary objectives of schools, and despite increased attention upon meeting a variety of children's and families' other pressing needs, it remains perhaps their most important responsibility. Schools try to balance excellence and equity, and are increasingly aware that they must provide children with a safe, emotionally supportive learning environment

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while also providing each student appropriate and challenging instruction that will give them a chance for future success (e.g., Callahan, 2001; Passow, 1977; Tomlinson, 1999; Treffinger, 1998). Recent events, from economic downturns and the global pandemic to quarantines and forced migration, have reinforced the need for school to be a safe, supportive place where the whole child is nurtured and encouraged (Cross, 2018; Subotnik et al., 2011). Federal and state regulations and policies have changed in recent years so that the annual yearly progress (AYP) of gifted children be measured, recorded, and reported (Plucker & Peters, 2016). This change has resulted in increased interest in programs and approaches that support gifted and talented learners, as school administrators and teachers are now responsible for showing AYP for that population (Plucker & Peters, 2016).

Historically, conceptions of intelligence were based upon IQ and other relatively rigid criteria (Brody & Stanley, 2005; Passow & Frasier, 1996; Tannenbaum, 2003), which tended to lead to services being limited to children who met this narrow definition (Callahan, 2004; Lupkowski-Shoplik et al., 2003; Treffinger et al., 2004). The emergence of inclusive, multifaceted conceptions of intelligence (e.g., Gardner, 1983/2011, 2006; Guilford, 1967, 1968; Guilford & Hoepfner, 1971; Renzulli, 1978, 2005; Sternberg, 2003; Sternberg & Clinkenbeard, 1995; Taylor, 1986) led to greater emphasis on recognizing and nurturing students' talents rather than focusing primarily on identifying or labeling children as "gifted" (Callahan, 2001; Peters et al., 2014; Plucker & Peters, 2016; Treffinger, 1998).

During the past 2 decades, an evolving conception of talent development has emerged, aligning with changes to related beliefs and frameworks. The most critical developments are related to expanded views of human potential (Dai, 2020), a shift in belief that giftedness and intelligence are dynamic rather than fixed or static (Olszewski-Kubilius & Thomson, 2015; Plucker & Callahan, 2014), the budding perception that human potential is malleable and incremental (Dai, 2020), a developmental theory of talent development (Subotnik et al., 2011; Dai, 2017), an emphasis on intellectual and psychosocial skills to support progression through the stages of talent development, and the goal of nurturing creative production and achievement for students in adulthood within their fields (Subotnik et al., 2011). The emphasis on actualization of giftedness or talent at a level of extreme expertise has implications for gifted education programming, including the goal of attaining eminence (Worrell et al., 2012).

A talent development paradigm shift primarily results from the inclusion of perspectives related to psychological science (Subotnik et al., 2011). Although recent discussions of this type have amplified, leaders in the field have championed these ideas for 40 years (Bloom 1985; Feldhusen, 1992; Robinson, 2012). Viewing talent development via a psychological science lens means recognizing that talent development evolves through dynamic interactions with appropriate

environmental opportunities (Dai, 2017). Thus, new articulations of talent development conceptually or theoretically directly impact gifted education programming and research initiatives (Dai & Chen, 2014). This chapter summarizes the nature of, and rationale for, talent development; identifies implications of talent development for school counselors; and describes several educational approaches for talent development.

Talent Development: Nature and Rationale

Talent development concerns all who are interested in empowering and enabling students to use, develop, and refine the talents they possess (Treffinger & Feldhusen, 1996; Treffinger et al., 2004). Successful talent development requires deliberate and thoughtful efforts that consider the context and climate of students, their school, the staff, and the surrounding community (Bloom, 1985; Treffinger, 1998; Treffinger et al., 2008). Consensus does not completely exist with regard to how best to approach talent development. Notions of how best to develop talent are inevitably colored by conceptions of intelligence, giftedness, assessment, and success (Borland, 2009; Callahan, 2001; Olszewski-Kubilius & Thomson, 2015; Renzulli, 1982; Subotnik et al., 2011; Treffinger, 1998; Treffinger et al., 2008). Despite these differences, talent development programs seek to respond to each learner's individual characteristics and strengths (Callahan, 2001; Schroth & Helfer, 2018; Treffinger, 1998; Treffinger et al., 2008). Talent development initiatives seek to address emerging views of talents and abilities, more complex and varied approaches to programming, and more progressive views of the nature and role of identification (Schroth & Helfer, 2009; Treffinger, 1998). Talent development thus encompasses efforts to empower and enable all students, including those historically thought of as gifted as well as all others who would benefit from certain programming experiences. Treffinger and colleagues (2004) identified three major sets of talent development goals for students. Through their talent development experiences, each student should become "a healthy, effective person, an independent learner, and a creatively productive person" (Treffinger et al., 2004, p. 11). These goals encompass high-level attainment in the content of the student's talent domain but extend beyond that to also include: being aware of personal styles or preferences and their implications for effective learning and productivity, having personal and social effectiveness, functioning effectively in team or group settings, being a leader, committing to lifelong learning and talent development, having the ability to set goals and be a self-directed learner, evaluating one's own work and products, defining and solving problems in original

and effective ways, communicating ideas and sharing products with others, and being confident and courageous in pursuing one's own goals and purposes despite obstacles.

Goals and Implications for Counselors

Counselors can play a vital role in supporting their school's efforts to recognize and develop the strengths and talents of many students. The powerful contributions of counselors can include, for example:

- empowering students (individually and in talent-specific groups) to view themselves as capable and productive, and to set high personal and professional goals and aspirations during the school years and beyond;
- guiding students in discovering, expressing, and applying their strengths and talents in a variety of settings;
- supporting students in their efforts to chart their future course (setting a clear focus and direction) for their future studies and career opportunities;
- supporting students' efforts to seek talent development opportunities and experiences and to become successful candidates for such opportunities (e.g., special advanced courses, afterschool or summer programs); and
- supporting the development of meaningful relationships and collaborative skills within students' talent domains as well as in classroom and out-of-school interactions with others.

Programming for Talent Development

A variety of approaches have been developed that may assist with talent development in the classroom or school. Some of the more popular ones include the Autonomous Learner Model, the Levels of Service approach, the Schoolwide Enrichment Model, Talent Search/Study of Mathematically Precocious Youth, Multiple Talent Model, Talent Identification and Development in Education, The Catalyst Model, and Advanced Academics.

Autonomous Learner Model

George Betts designed the Autonomous Learner Model (ALM) to meet the varied cognitive and social and emotional needs of gifted and talented students (Maker & Nielson, 1995). The ALM is also intended to assist students' develop-

ment of the strategies and attitudes necessary for independent learning; its major goal is building a sense of self-direction in students. The ALM focuses on developing a program for students that includes five essential dimensions of learning: (a) orientation, (b) individual development, (c) enrichment, (d) seminars, and (e) in-depth study (Betts, 2004; Maker & Nielson, 1995). As students receive support in these dimensions, it is assumed that their emotional, social, and cognitive needs will be met, thereby transforming the students into autonomous learners (Maker & Nielson, 1995).

Orientation is intended to build students' basic understandings about the concept of giftedness, personal interests and abilities, and the ALM itself, and to initiate them to the opportunities and responsibilities they will have as part of the program (Betts, 2004; Maker & Nielson, 1995). *Individual development*, the second dimension, allows students to engage in activities and experiences that make possible the development of varied learning skills, greater personal understanding, improved interpersonal skills, and career exploration. *Enrichment* includes activities such as explorations, investigations, cultural activities, service opportunities, and adventure trips. These activities allow students to determine what learning opportunities exist and provide opportunities for students to play a role in the selection and direction of their own learning experiences. *Seminars* emphasize the production of new knowledge by working in small groups on topics that may be futuristic, controversial, problematic, of general interest, or involving advanced knowledge. The fifth dimension, *in-depth study*, allows students to build upon the variety of skills accumulated in previous activities to conduct independent investigations on topics of their choice. Each of these dimensions is equally important to the others, and failure to attend to any can jeopardize the effectiveness of the ALM (Betts, 2004; Maker & Nielson, 1995). When used appropriately, the ALM tailors instruction and assignments to students' needs, learning styles, and interests. The ALM's emphasis on meeting the social and emotional needs of learners may represent an important area of opportunity for counselors and instructional personnel to work collaboratively for talent development.

Levels of Service Approach

The Levels of Service (LoS) approach is built around a framework that provides four separate levels of service. The LoS approach seeks to provide students with academic programming that is appropriate, challenging, and developmental in nature (Treffinger et al., 2004). *Appropriate* instruction is compatible or well matched to an individual's needs and wants. It is attuned to a student's personal characteristics and needs, provides a strong educational fit, and is carefully designed to make sense instructionally. *Challenging* experiences are energiz-

ing, exciting, expanding, motivating, stretching, or stimulating for the learner, designed to promote a student's passions. They tend to inspire intense interest and to arouse sustained involvement. *Developmental programming* takes into account a student's unique developmental characteristics (physical, intellectual, social, and emotional) to ensure that learning is active, engaging, and growth-producing.

Level I in the LoS approach seeks to provide instructional activities, experiences, and events that will be appropriate for all students (Treffinger, 1998; Treffinger et al., 2004). Level I services take place most often in a classroom setting, every day, in every classroom; they are usually brief and involve readily available resources. Although regular classroom teachers are chiefly responsible for planning, arranging, and delivering Level I services, they often involve other individuals as well, including curriculum specialists, counselors, guest lecturers, parents, and administrators. Level I activities are presented over a specific, albeit brief, time frame and use readily accessible resources (Treffinger, 1998; Treffinger et al., 2004).

Building upon skills and interests garnered earlier, Level II of the LoS model provides a broad range of services for many students. Level II activities are open and include many students (potentially all) who are able to participate in them. As with Level I services, many Level II activities take place in the regular education classroom, but some may also occur in other settings, based on interest; participation is often self-selecting. Level II activities focus on enrichment and extensions of experiences and provide students with opportunities to develop their talents, strengths, interests, and potential. They are often longer in duration or require deeper involvement than those in Level I and may evolve from a student's personal interests or experiences.

Level III activities are for students whose needs are not met by the regular curriculum; as such, they focus on in-depth studies that provide a high degree of challenge for the small number of students who are ready for and motivated by such experiences. The number and variety of Level III opportunities offered is directly related to student needs, which in turn are determined by student talents, competencies, interests, and abilities. Screening and selection for Level III services use specific information related to the activity to ascertain relevant student characteristics essential for effective performance. Level III services are very different from those provided at Levels I and II, as they extend beyond the general curriculum and are linked directly to certain skills, goals, objectives, and indicators of success. Level III activities often extend beyond the school day and the school building, and may involve regularly scheduled small-group or individual activities.

Level IV services are specific experiences that are tailored to the high-level needs of learners who have soared beyond the school's customary curricular offer-

ings; they are advanced and challenging, emphasizing productive thinking and original inquiry within a specific talent area or domain. Level IV services represent unique projects that involve rigorous content, processes, and products. Level IV services might include early admission to kindergarten, grade-skipping, dual enrollment in a college or university, accelerated content, or advanced research.

Schoolwide Enrichment Model

The Schoolwide Enrichment Model (SEM) promotes both challenging and enjoyable high-end learning across a wide range of school types, levels, and demographic differences (Renzulli & Reis, 2014). The SEM is predicated upon the Enrichment Triad Model, which provides students with three types of enrichment (Renzulli & Reis, 2003). Type I enrichment exposes students to disciplines, topics, occupations, speakers, hobbies, places, and events that are not part of the regular curriculum, and it is provided through speakers, mini-courses, demonstrations, or performances. Type II enrichment consists of specific training to develop students' thinking, problem-solving, learning, reference, and communication skills; this training often buttresses skills students need to pursue interests initiated during Type I enrichment. Type III enrichment assists students who choose to pursue self-selected interests and requires the time commitment necessary for advanced content acquisition and process training in which students take the role of a firsthand investigator (Renzulli & Reis, 2014). All three types of enrichment require planning and implementation on a schoolwide basis.

The SEM requires the identification of a talent pool from within the school, drawn from the top 10%–15% of students at the individual school (Renzulli & Reis, 2014). This group is determined using achievement tests, teacher nominations, and assessments of potential, as well as nominations from students and parents. Talent pool students undergo assessment of interests, learning styles, and preexisting knowledge as well as curriculum compacting to modify the regular curriculum so that previously mastered content is eliminated. This streamlining of the curriculum avoids boring highly able students with repetition while also freeing up time for more challenging academic pursuits. Finally, all students are offered Type I, II, and III enrichment experiences. Type III enrichment activities, although available to all, are probably most appropriate for those students with the highest levels of ability, interest, and task commitment (i.e., the talent pool students).

Although the SEM is chiefly a curricular model, its far-reaching nature has certain ramifications on the program structures at the school. Three school structures must be adjusted or created for the SEM's successful implementation: (a) the regular curriculum, (b) enrichment clusters, and (c) a continuum of special

services. The SEM requires that the regular curriculum be modified in three ways. First, required material is differentiated through compacting, and redundant material is eliminated as is appropriate for high-ability students. Second, eliminated content is replaced with "selected, in-depth learning experiences" that are created using systematic content intensification procedures (Renzulli & Reis, 2003, p. 188). Third, regular classroom activities are modified to include the enrichment activities recommended in the Enrichment Triad Model (Renzulli, 1977; Renzulli & Reis, 2003, 2014).

These modifications support enrichment clusters, a second component of the SEM. Not all students who share the same interests will be in the same grade. As a result, nongraded groups of students come together at designated times to work with an adult who shares their interest and has expertise useful to the enrichment cluster members. Adults who assist with the enrichment clusters can include teachers, parents, and others whose interests mirror those of students as revealed by interest surveys. Content in the enrichment clusters focuses upon inductive learning, where students are faced with real-world problems that are solved through the development of authentic problems and services. Enrichment clusters are seen as an ideal way to promote students' self-concepts (Marsh et al., 1995), "since every child is special if we create conditions in which that child can be a specialist within a specialty group" (Renzulli & Reis, 2003, p. 190).

Provision of a continuum of special services is the final structural consideration for SEM schools (Renzulli & Reis, 2003, 2014). The SEM envisions a broad range of options for gifted learners' individual needs, beginning with early admission to kindergarten and continuing through Advanced Placement, honors, or college classes for high school students. Other options might include counseling, various types of acceleration, assistance for advanced-level work, mentorships, pull-out groups, and advanced classes. Magnet and charter schools might be necessary to fully develop talented students, and extracurricular activities should be provided as needed. Enrichment programs such as Saturday and summer programs, science fairs, and others support the school's efforts to meet student needs.

Talent Search/Study of Mathematically Precocious Youth

Underlying the Talent Search/Study of Mathematically Precocious Youth (TS/SMPY) model is a belief that, for academically talented students, school represents an exercise in "time serving," where they are forced "to languish in painfully slow-paced mathematics and science classes" (Stanley & Benbow, 1982, p. 4). This represents a terrible waste of talent, where precocious students are forced to choose between unacceptable options, such as, "daydreaming, becoming the class clown, manicuring unnecessary homework, 'baiting' the teacher, showing

off their knowledge, or skipping class" (Stanley & Benbow, 1982, p. 4). Instead of these choices, the TS/SMPY model suggests that, for certain highly advanced students, a model using diagnostic testing followed by prescribed instruction (DT→PI) be used to radically accelerate their education. TS/SMPY strongly promotes early admission to college for certain students and sees many individual and national benefits in so doing.

TS/SMPY uses a systematic assessment program to identify talent for services (Lupkowski-Shoplik et al., 2003). Rather than using achievement tests or IQ tests, TS/SMPY uses above-level aptitude tests that allow students to use their reasoning abilities to solve problems, even when faced with unfamiliar content (Lupkowski-Shoplik et al., 2003). Identification is a two-step process. First, an initial screening based upon standardized tests, such as the Iowa Tests of Basic Skills or the Stanford 10, is used to identify students who score at or above a designated level (95th or 97th percentile). The next step is to administer an above-level test, such as the SAT, the ACT, the School and College Ability Test, or the Spatial Test Battery. Although TS/SMPY was initially concerned with finding children who were exceptionally talented in mathematics, some work has since been done with those students who score high on the verbal portions of the tests.

Once students are identified , an array of educational options, referred to as a "smorgasbord," is considered for each student's unique educational needs. Many of these options are accelerative in nature and include:

- early entrance to kindergarten,
- grade-skipping,
- taking selected classes with an older age group,
- independent study/tutoring in advanced subject matter,
- testing out of courses,
- distance learning courses,
- fast-paced classes or compressed curricula,
- International Baccalaureate program,
- Advanced Placement courses,
- summer courses,
- dual enrollment in high school and college,
- early entrance to college, and
- concurrent undergraduate and graduate programs. (Lupkowski-Shoplik et al., 2003, p. 208)

Although not all options are appropriate for all students, TS/SMPY seeks to move students to instruction that is appropriate for their intellectual and educational needs (Lupkowski-Shoplik et al., 2003). Stanley's DT→PI model is at the heart of all educational approaches that TS/SMPY fancies (Stanley & Benbow,

1982). Students are pretested to determine what they already know and what they do not know. As a result of the pretesting, class time focuses on those concepts students have not yet mastered, and minimal time is spent on concepts already well understood. Students who have studied a subject demonstrate mastery via a posttest. Students are encouraged to move ahead at an individualized pace, and students in a single room are often taught at different levels, depending upon their needs. The DT→PI model allows students to move through material rapidly rather than being constrained by artificial notions about age-appropriate instruction.

Some evidence exists to suggest the TS/SMPY model can be effective with children of color, those from low socioeconomic (SES) backgrounds, and English language learners. In a study examining 45 sixth graders from ethnic-racial minority and low-income backgrounds, these students were provided with a 110-hour academic program on Saturdays and at a residential college during the summer (Lynch & Mills, 1993). These students made statistically greater gains than a comparison group of 46 students of similar SES, gender, and ethnicity on pre- and posttest measures of math. Although not statistically significant, the gains made on the verbal measures were greater than those made by the comparison group.

TS/SMPY's effectiveness with a specific group is well documented, but its promise for diverse learners is problematic. Students of color, especially Hispanics and African Americans, perform much more poorly on SAT tests, one of the two primary identification tools of TS/SMPY, than do White and Asian students (College Board, 1999). As a result, it seems difficult to believe the program, as currently conceptualized, could effectively assist students who were not already performing at an extremely high level.

Multiple Talent Model

Taylor's Multiple Talent Model is designed to develop children's creative and complex thinking processes (Maker & Nielson, 1995; Taylor, 1986). Taylor (1986) believed that nearly all children, when evaluated for achievement in a variety of talent areas, were gifted in some way. Eschewing traditional labels of gifted and talented, Taylor sought to create opportunities for all children that would develop abilities in three areas: mental ability, creativity, and functional thinking. The Multiple Talent approach was predicated upon children acquiring knowledge as they focused upon talent development, which made knowledge acquisition more of a consequence of education rather than the end goal. Although the Multiple Talent Model was intended as a whole-day educational approach for all children, it has also been used in special classrooms and pull-out programs for gifted and talented students. The approach's major modifications to the general curriculum require altering classroom processes, stressing the use of information

rather than its acquisition. Throughout the school day, teachers focus on various talents, thereby allowing many children a chance to excel.

Taylor (1986) identified nine talents that were to be developed as part of the Multiple Talent Model. The original talents include academic, productive thinking, communications, forecasting, decision making, and planning. To these talents were later added the following: implementing, human relations, and discerning opportunities. These talents are introduced to students through six components: student instruction, curriculum integration, talent skills emphasis, student reinforcement, materials, and student grouping (Schlichter, 1986; Taylor, 1986). Optimally, students are explicitly taught the skills of the nine talent clusters, and this teaching is integrated into the general curriculum. Throughout instruction, teachers emphasize each of the talent skills involved (i.e., productive thinking, decision making, forecasting, and planning) as a way of showing students that each of these is valid and necessary. Individual activities are balanced with group instruction so that each student may receive the level of reinforcement they need. If implemented as intended, the Multiple Talent Model works well to develop the talents of all students.

Talent Identification and Development in Education

Feldhusen (1992, 2005) worked to have teachers, administrators, and parents focus on talent development and recognition through his Talent Identification and Development in Education (TIDE) model. The TIDE model defined major categories of talent to include artistic, athletic, mathematical, musical, personal/social, technological, and vocational. Feldhusen, however, maintained that many more children are talented than traditional gifted programs recognize or serve. As a result, the TIDE model concentrated on providing appropriate services to all students, with adjustments made as necessary so that all children received an appropriate level of challenge (Feldhusen, 1992, 2003, 2005).

The TIDE model first focuses upon developing divergent and convergent thinking skills, chiefly with creative thinking exercises, but also with the introduction of thinking skills in other verbal and nonverbal areas. A broad variety of thinking skills might include stretch logic, critical thinking, analysis, synthesis, evaluation, decision making, classification, comparison, and analogical thinking. Next, the TIDE model works to increase creative problem-solving abilities. During this stage, the teacher uses a variety of tools to allow students to use more complex and practical strategies and systems. Finally, the TIDE model seeks to develop independent study skills within the context of individual or small-group projects. These projects are especially appropriate for highly talented children, as they engage students in the identification of a problem; call for data gathering

from books, the Internet, and other sources; ask students to interpret the data gathered; and encourage students to develop creative ways in which to communicate results. The TIDE model may be used in whole-group or small-group settings, as well as independent study settings. It can be used effectively to develop the talents of a wide spectrum of students.

The Catalyst Model

The Catalyst Model (TCM) applies resource consultation and collaboration between school staffs to the practice of gifted education. Generally, gifted education specialists, regular education teachers, and other school personnel combine strengths and pool resources to serve more students more often when compared to traditional programming models. Thus, the provision of specialized services and support systems for gifted students is a joint effort involving the collective planning, implementation, and evaluation of programming among gifted education specialists, the instructional staff, administrators, school psychologists, and counselors (Ward & Landrum, 1994).

An initial study of TCM (Landrum, 2001a) yielded evidence that the resource consultation leads to diverse and more frequent services to students, resulting in the provision of differentiated educational and socioemotional programming to both students who have been previously identified as gifted and those who have not. Educational services provided to both identified and nonidentified students are delivered primarily in the general education classroom and increase in frequency over time (Kirschenbaum et al., 1999).

TCM has emerged as a viable approach to talent development that emphasizes the provision of services to students without consideration of whether students are identified or not identified as gifted (Landrum, 2002). The focus on addressing relevant student needs, versus reliance on formal identification procedures, empowers and enables all students. Most specifically, the school staffs regularly engage in consultative and collaborative activities, such as cooperative planning, student academic and psychological assessment, the development and implementation of differentiated curricula, and the provision of support services (Landrum, 2001b).

Advanced Academics

In response to some of the criticisms of traditional gifted education programs, the Advanced Academics (AA) approach was devised to provide an alternative route to serving bright and talented children (Peters et al., 2014). AA emphasizes

directing efforts and services toward children who are doing well in school, rather than worrying about children who might show potential for high performance later in life (Peters et al., 2014). Advanced Academics focuses upon providing those children who are not challenged by the general education curriculum with instruction that is faster, deeper, and more rigorous than that typically offered by the schools (Peters et al., 2014). It was conceived as a completely needs-based and school-based construct that springs from historical conceptions of gifted education and student need (Peters et al., 2014). The creators of AA seek to disassociate it from the understanding of talent, creativity, and eminence, which they see as the role of academics rather than those working in the schools, and instead to focus purely upon advancing children's academic skills (Peters et al., 2014).

Eschewing a "step-by-step procedure or 'canned' program" (Peters et al., 2014, p. 2) for those trying to adopt a system promoting AA in a school, the authors instead suggested that the choices of advanced educational opportunities are local ones, and should be made by administrators, teachers, and parents based upon the needs and values of a specific community at a certain time. To achieve the ends of AA, however, it is suggested that administrators, teachers, and other school personnel examine improving the process of identifying students in need of AA programming, cluster grouping, acceleration, and including more children from traditionally underrepresented groups (Peters et al., 2014). Although AA may prove too nebulous and imprecise for many in the schools, it provides an interesting approach for those who would like to create a more individualized approach to serving gifted children.

The Psychology of High Performance

Some theorists have suggested that, rather than worry about defining terms such as *gifted* and *talented*, it would be better to instead focus upon how talent is manifested developmentally in the domains (see Subotnik et al., 2019). Building upon the approach developed by Bloom in the 1980s, this approach examines the similarities and differences in development between and among different domains (Bloom, 1985; Subotnik et al., 2019). This work carefully examines the manifestation of high performance, especially with regard to the major role of psychosocial skills (also known as mental skills) in its formation (Subotnik et al., 2019).

Analyzing developmental trajectories from potential in a domain to creative productivity, the psychology of high performance approach is interested in whether and when individuals meet the necessary benchmarks to move to the next level in talent development (Subotnik et al., 2019). These level progressions include moving from potential to achievement, from achievement to expertise,

and from expertise to further performance (Subotnik et al., 2019). This approach seeks to identify abilities essential for talent development in certain domains, as well as those factors and parameters that make a commitment to certain types of teaching and coaching effective and valuable, which might be especially beneficial for children of color, English language learners, and students from low-SES backgrounds (Subotnik et al., 2019; Walqui & Bunch, 2019).

This approach promises an exciting vision of future schools where supports and instruction would be targeted to the specific needs of children exhibiting certain talents and skills. For such an approach to work, of course, extensive research would be necessary to define the benchmarks that indicate certain levels of talent in a given domain, and the supports and instruction necessary to support this approach. Efforts to gather such information have begun and will presumably increase as the viability of this approach is demonstrated (Subotnik et al., 2019). The psychology of high performance will provide many avenues for research and scholarship, and it will be interesting to see how this approach develops.

Conclusion

Student talent development does not hinge upon a single isolated feature, option, or person. Instead, it is provided through the collaborative and resourceful efforts of students, parents, teachers, counselors, and others. The climate and tone of buildings or classrooms are an extension of the people who work within the organization. The internal working structure within a school building is only as strong as the creative thinking and appreciation of the people representing the organizational learning community (Argyris & Schön, 1996). Counselors, social workers, support staff, instructional coaches and specialists, building leaders, and teachers all must work to create a learning culture that nurtures students' growth (Hughes et al., 2019; Schroth & Helfer, 2018).

Programming services must be respectful and honorable in practice and contention. All students need exposure to and development of mindful habits of thinking and appropriate explicit instruction. Collaborative learning cultures use diverse perspectives and understandings to prepare curricular choices and program offerings. The human psyche demands more than external motivation (Glasser, 1986, p. 80). Empowering students through active learning fosters intrinsic motivation. Programming services that honor the learner provide these opportunities. Successful talent development results from choreographed working relationships and targeted learning experiences. The choices and offerings presented to the 21st-century student must include learning environments that maximize talent development. The best programming options for given populations will respond

to children's targeted interests and wonderings. Effective talent development is a cooperative process, extending beyond the traditional boundaries of classroom walls.

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CHAPTER 4

Reexamining Overexcitability: A Framework for Understanding Intense Experience

MICHAEL M. PIECHOWSKI AND CHRISTIANE WELLS

Very bright children enter school with high hopes only to have those hopes dashed by the crushing reality of rigid requirements and tedious pace of learning. Schools are not designed to serve those who are eager to learn and whose relentless questioning and uncommon interests strain the patience of teachers and peers. A bright 16-year-old expressed what typically happens:

> I'm a very misunderstood person. I know that I am blessed by God with many talents that others don't have and I'm thankful, but people think I'm bigheaded and a show off when all I'm doing is trying to have fun.
>
> People think my life is easy because I'm talented, but I have a lot of problems of my own just because of these talents. I often even get cut down for something good that I do. This is very hard to cope with.
>
> I'm not a very confident person, though people think that I am. I don't think I'm very good looking, talented or smart but others say I am, so I just kind of go along with them. I'm afraid of losing in sports and in relationships. (Piechowski, 2014, p. 212)

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A number of difficulties are apparent that are the direct result of the gap between this boy and his peers. Speaking in full sentences and giving articulate answers were interpreted by others as showing off, and his painful sense of isolation was mistaken for confidence. He could, of course, as many gifted students do, hide his abilities, and even deliberately lower his grades. However, if he did that, he would not be true to himself, creating internal conflict and further distress.

Another gifted student, who stood up for her values and was bullied throughout middle and high school, had this to say:

> You can't escape who you are. You can deny it, even run from it, but can never, never escape it. Most people were ashamed of the bad parts of themselves. I was ashamed of my *good* qualities. Maybe being strong would serve me well when I grew up, but it was destroying my life right now. Why couldn't I be like other teenagers? Other kids didn't fret over the things that worried me. (Blanco, 2003, p. 106)

Gifted and creative children experience and act differently from their peers, but this difference is often misunderstood. Excitement and high energy are often viewed as hyperactivity, persistence as nagging or disrespect, questioning as undermining authority, imagination as not paying attention, strong emotions as immaturity, creativity and spontaneity as distractibility, and self-directedness as oppositionality. Gifted children may be described as hard to manage, badly behaved, or just plain odd—despite, or perhaps because of, their intelligence. Today, gifted students of different ethnicities and lower social strata are often not recognized as gifted (Peterson, 1997, 2009, 2018). Such students do not always "make nice"; instead, they may appear defiant when they feel they are not respected.

A Different Quality of Experiencing

Giftedness represents a higher level of energy. Gifted children tend to be more active than their peers. Their physical, intellectual, or emotional energy tends to be high unless, by lack of acceptance, it has been dampened into depression.

We believe many gifted children also engage with the world more vividly and more intensely. They experience life at a high pitch but also with greater sensitivity to nuance. Thoughts and sensations race and tumble over each other, often on many tracks simultaneously. Memories, desires, and a rich tapestry of feeling produce a multidimensional perception of the world, other persons, and one's

own life and its many possibilities. It is like having a dish antenna that captures tens of thousands of channels instead of a few dozen.

The concept of heightened excitability, or *overexcitability*, was used by Kazimierz Dabrowski, a Polish psychiatrist and psychologist who was interested in the psychological makeup of intellectually and artistically gifted youth (Dabrowski, 1964, 1967). These young people came to him with a crisis of values, existential despair, doubts about their vocation, stage anxiety, depression, and other intensely felt emotional difficulties. To mental health professionals, such crises look pathological. However, to Dabrowski, the emotional forces that brought on this suffering and misery also pushed for emotional growth and resolution. To explain this phenomenon, he developed a theory called the *theory of positive disintegration*—because the new is in the process of replacing the old that no longer works. The theory includes the concept of overexcitabilities as part of a talented individual's developmental potential. (Sometimes, mistakenly, it is called a "theory of overexcitabilities.") In brief, these characteristics, together with conscious effort toward becoming a better human being, are the necessary factors for advanced emotional growth (for an outline of the theory see Ackerman, 2009; Daniels & Piechowski, 2009; Mendaglio, 2008).

The term *overexcitability* is firmly established in research literature (De Bondt et al., 2019; Falk & Miller, 2009). It means to be very alive, perceptive, persistent, energetic, and intense—or quiet but feeling deeply and having vivid mental or aural pictures. Some people call this level of experiencing "intensity," but the picture is more complex and far from fully explored (Piechowski, 2014). Keep in mind that heightened sensitivity is also involved. Overexcitabilities come as original equipment (OE), something a child is born with. Highly excitable people can be, and often are, annoying and bothersome to less excitable people.

The nervous system responds to what goes on in the external environment and to what goes on inside—the internal environment. Each person differs from one another in the ways they become stimulated. The excitement may be moderate or strong, acute or sustained. Excitability is a property of the nervous system and the brain. How the brain processes experience varies from individual to individual.

Intense acting and reacting may appear excessive and out of proportion to the situation, yet these are often essential components of talent. Without passion no talent can be strong (Piirto, 2004). Intensity creates a distinctly different quality of experience—not just more than the "normal" average, but distinctly more alive and alert. A highly sensitive child also responds to fine nuances of emotion, as well as to errors and gaps in knowledge, qualities of imagination, and refined sensory experience. This needs to be distinguished from the more negative connotation of sensitivity of people who are easily offended or upset.

The research has shown that not all gifted individuals experience Dabrowski's overexcitabilities, but those who do are often misunderstood and sometimes mislabeled. Since the first edition of this book, more information has come to light about the history of overexcitability, and there has also been increased knowledge and understanding about twice-exceptional children—those who are gifted and also diagnosed with a second exceptionality (see Chapter 16 by Carpenter, this volume). In this chapter, we will encourage an understanding of the overexcitabilities as a neurological difference that creates challenges, and we will also present updated research as part of the discussion.

Five Areas of Intensity (Overexcitability)

Individual intensities have many possible expressions, as shown in Table 4.1 (Piechowski, 1979, 2014).

Psychomotor

High energy level finds expression in rapid talk, gesticulation, intense athletic activity, hard physical work, and a tendency to be highly competitive or driven. One student described his high energy level as always present: "It would be easier to tell you when I don't feel the most energy" (Piechowski, 2014, p. 49). Another wrote, "Often I get bursts of energy that make me twitch or jump as if suddenly shocked with a high dosage of electricity" (Piechowski, 2014, p. 46). He named exactly what this is—nerve cells conducting stimulation as pulses of electricity.

Psychomotor overexcitability also includes hyperactivity, as well as the expression of emotional tension through a psychomotor outlet. Examples include pacing and gesticulating, but also outbursts of anger and explosiveness.

Sensual

Heightened responsiveness to sensory stimuli makes sensory experience rich, alive, and refined, with a person taking delight in beautiful objects, textures, tastes, aromas, or sounds. As one adolescent said,

> I seem to notice more smells than a lot of other people. I love dark, musty smells and earthy smells, herbs and things like that. I love the smell of clean air in spring and tree blossoms and

Table 4.1
Forms and Expressions of Overexcitability

Psychomotor	• *Surplus of Energy:* rapid speech, marked excitation, intense physical activity (e.g., fast games and sports), pressure for action (e.g., organizing), marked competitiveness • *Psychomotor Expression of Emotional Tension:* compulsive talking and chattering, impulsive actions, nervous habits (e.g., tics, nail biting), workaholism, acting out
Sensual	• *Enhanced Sensory and Aesthetic Pleasure:* seeing, smelling, tasting, touching, hearing, and sex; delight in beautiful objects, sounds of words, music, form, color, balance • *Sensual Expression of Emotional Tension:* overeating, sexual outlets, buying sprees, desire for the limelight
Intellectual	• *Intensified Activity of the Mind:* curiosity, concentration, capacity for sustained intellectual effort, avid reading; keen observation, detailed visual recall, detailed planning; passion for precision • *Passion for Probing Questions and Problem Solving:* search for truth and understanding; forming new concepts; tenacity in problem solving • *Reflective Thought:* thinking about thinking, love of theory and analysis, preoccupation with logic, moral thinking, introspection (but without self-judgment), conceptual and intuitive integration; independence of thought (sometimes very critical)
Imaginational	• *Free Play of the Imagination:* frequent use of image and metaphor, facility for invention and fantasy, facility for detailed visualization, poetic and dramatic perception, animistic and magical thinking • *Capacity for Living in a World of Fantasy:* predilection for magic and fairy tales, creation of private worlds, imaginary companions, dramatization • *Spontaneous Imagery as an Expression of Emotional Tension:* animistic imagery, mixing truth and fiction, elaborate dreams, illusions • *Low Tolerance of Boredom:* need for novelty and variety
Emotional	• *Feelings and Emotions Intensified:* extremes of emotion and of positive and negative feelings, complex emotions, identification with others' feelings, awareness of a whole range of feelings • *Strong Somatic Expressions:* tense stomach, sinking heart, blushing, flushing, pounding heart, sweaty palms • *Strong Affective Expressions:* inhibition (timidity, shyness); enthusiasm, euphoria, pride; strong affective memory; feelings of unreality, fears and anxieties, feelings of shame and guilt, concern with death, depressive and suicidal moods

Table 4.1, *continued*

Emotional, *continued*	• *Capacity for Strong Attachments, Deep Relationships:* strong emotional ties and attachments to persons, living things, places; attachments to animals; difficulty adjusting to new environments; compassion, responsiveness to others, sensitivity in relationships; loneliness • *Well-Differentiated Feelings Toward Self:* inner dialogue and self-judgment

Note. Information gathered from Piechowski, 1979, 2014.

> things and the smell of clean bodies, especially hair. (Piechowski, 2014, p. 57)

Sensual and emotional overexcitability often combine together, making the experience richer and more meaningful. Like the psychomotor form, sensual overexcitability can also include the expression of emotional tension through sensual outlets, such as seeking comfort in food.

Intellectual

A gifted mind is easily stimulated by questions, theories, the quest for truth, and a craving for knowledge, discovery, and new problems to solve. For example,

> I read stories deeper, read into questions, find catchy puns or mistakes of words in people's writings, et cetera. If something has no meaning I try to give it some. If it means something I wonder why. When given a topic to write about, for example, I usually have a completely different approach to the same topic than does the rest of the class. (Piechowski, 2014, p. 66)

One of the consequences of intellectual intensity may be an interest in uncommon domains and involvement in games that require accumulation of considerable knowledge and highly complex rules. To their classmates, "nerds" and "geeks" may appear odd and incomprehensible (Anderegg, 2007). Intellectual is the only type that Dabrowski saw as not requiring treatment, or accommodations, but he was concerned about the likelihood of one-sided development.

Imaginational

Imagination enables creative inspiration, invention, and discovery of new possibilities, as well as the ability to see the humorous side of events. Daydreaming may be idle or creative; deep absorption in private imagery may be trancelike. Boredom is anathema, and the need for novelty is absolute. As one student noted, "Once in a while I try to hypnotize my plants. And I even tried to put a rock in a trance, but I think that day I was desperate for something to do" (Piechowski, 2014, p. 101). Vividness of imagery, unusual metaphors, and rich dreams are typical of writers and other creators. A surprising number of children have imaginary friends, often unknown to the adults around them (Piechowski, 2014; Taylor, 1999). Humor may also be a defense mechanism, especially for class clowns, as a way of coping with their giftedness or a difficult life at home (Jacoby, 1988).

Imaginational overexcitability can also look like inattention. Some students are so engrossed in daydreaming and their inner worlds that it has a negative impact on their ability to pay attention in the classroom. In some cases, the world in their imagination becomes more important than concrete reality for the individual, and it is important to help the child establish a balance between these realities.

Emotional

The heightened intensity of emotional life produces a wide range of feelings experienced very deeply—compassion, responsibility, self-examination and self-judgment, fears and anxieties, and deep attachments to people, objects, and places. A strong sense of fairness compels a child to act—often in defense of another not being treated fairly—by standing up to a teacher. Emotional intensity becomes evident early and tends to remain for life:

> Sometimes after talking to someone, being alone watching the animals at sunrise, I feel as if I should conquer the world, do anything and everything. I feel like I am a bird who can soar with . . . just me, the wind, and the sun. (Piechowski, 2014, p. 156)

On the downside, there may be depression: "Depression, especially self-induced depression, causes me to think deeply and search deeply into myself, it may also cause me to react violently or forcibly to a situation or problem" (Piechowski, 2014, p. 160).

Response to Stress

Because they have less control over their lives, children and adolescents are often subject to more stress than adults, not less. As mentioned previously, emotional tension may be funneled into a psychomotor channel through actions that allow for its discharge. Examples include compulsive talking and chattering, acting on impulse, displaying nervous habits (kicking one's feet, drumming fingers, pacing, biting pencils and fingernails), working compulsively, or acting destructively. Emotional discomfort, such as feeling sad or upset, may be shunted into the sensual sphere as a source of comfort. Examples include eating rich foods, drinking alcohol, stroking furs or another person, or inhaling perfumes. To a child with a rich imagination, anxiety can paint horrors and catastrophic scenarios. To an intensely intellectual child, anxiety or conflict can also lead to endless rumination and internal argument. Harrison and Van Haneghan (2011) explored the relationship between overexcitabilities and insomnia, fear of the unknown, and death anxiety in gifted middle and high school students. They found that gifted students had higher levels of insomnia, fear of the unknown, and overexcitabilities compared with typical students.

Self-Recognition

When gifted children are asked which expressions of overexcitability apply to them, they readily give examples of corresponding behaviors and feelings. Strickland (2001) developed an instructional unit for gifted middle and high school students to aid the exploration, understanding, and acceptance of these often unsettling traits. Instruments for measuring these characteristics have been developed over the years, spurring research studies including other countries, such as Venezuela, Turkey, Taiwan, Mexico, Spain, and Korea, that found strikingly similar profiles. Thus, the five characteristics of intensity (overexcitability) in the gifted have cross-cultural validity (for a review, see Falk & Miller, 2009).

The items in Table 4.1 are a tool for counseling gifted students, individually or in groups. When students produce their own examples for the items that apply to them, this focuses their attention on their experience and acknowledges and affirms them as persons. Similarly, one can use the questions of the Overexcitability Questionnaire (OEQ) one at a time (see Figure 4.1). When responses are written out, the student has the benefit of creating a record of the experience that they can consult at a later time. Rivero (2010) described how teens can recognize, work with, and enjoy their overexcitabilities.

Figure 4.1 *Overexcitability Questionnaire*

1. Describe how you feel when you are extremely joyous, ecstatic, or incredibly happy.
2. What has been your experience of the most intense pleasure?
3. How vivid are your dreams, daydreams, and fantasies? Describe.
4. What kinds of things get your mind going?
5. Describe what you do when you feel full of energy.
6. What attracts you in people you like, and what in those you become close to?
7. How do you act when you get excited?
8. How well do you visualize events, people, and things—real or imaginary? Give examples.
9. What do you like to concentrate on the most?
10. What physical activity (or, inactivity) gives you the most satisfaction?
11. What pleasures do you derive from looking at things?
12. What pleasures do you get from different tastes?
13. What delights you in different smells?
14. What pleasures do you experience from touching?
15. What pleasures do you experience from different sounds?
16. Do you sometimes catch yourself seeing, hearing, or imagining things that aren't really there? Give examples.
17. How do you think about your own thinking? Describe.
18. What gives you the strongest urge to do something? Please, elaborate.
19. Does it sometimes appear to you that things around you have a life of their own, and that animals, plants, and all things in nature have their own feelings? Give examples.
20. When you are faced with a difficult idea or a concept, what do you do in order for it to become clear?
21. What do you do when you feel poetic? Describe.
22. How often do you carry on arguments in your head? What sorts of things are they about?
23. When you ask yourself, "Who am I?" what is the answer?
24. When you were young, did you have an imaginary playmate? One, or several? Please, describe.

Note. From *"Mellow Out," They Say. If I Only Could: Intensities and Sensitivities of the Young and Bright* (2nd ed., p. 363), by M. M. Piechowski, 2014, Royal Fireworks Press. Copyright 2014 by M. M. Piechowski. Reprinted with permission of the author.

Intensities and sensitivities need to be accepted as the child's natural way of experiencing the world. Daniels and Meckstroth (2009) and Kurcinka (2015) offered strategies to help children and parents cope with intensities and sensitivities in an understanding and accepting way.

Overexcitability and Neurodiversity

Although Dabrowski's theory places the overexcitabilities within a theory that serves as an alternative framework to pathologizing intense experience, there is some overlap with modern psychiatric diagnoses. Dabrowski's (1938/2019) early work described conditions that were not named until after his death in 1980. Two examples include Attention Deficit/Hyperactivity Disorder (ADHD) and autism spectrum disorder (ASD), which both include symptoms that overlap with certain types of overexcitabilities. When the overexcitabilities were first introduced to the field of gifted education in 1979, these conditions had not yet been established in their current forms. We would like to discourage counselors from the dichotomous thinking that characteristics are indicative of *either* overexcitability *or* a disorder. It makes much more sense to think of these characteristics and symptoms as coexisting on a continuum of variation based in the nervous system. Neurodiversity is a way of viewing these developmental conditions as "naturally occurring cognitive variations with distinctive strengths" (Silberman, 2016, p. 16). Examples of how exceptional ability and brain differences coexist can be found in Gail Saltz's (2017) book *The Power of Different*.

Before his theory was fully developed, Dabrowski (1938/2019) wrote about the overexcitabilities as characteristics of nervousness, which he differentiated first into four types and later into five. His 1938 paper, "Types of Increased Psychic Excitability," is now available in English, and it includes detailed descriptions of these characteristics. In Dabrowski's early work, at times he was describing what would be considered symptoms of ADHD in modern times (Mika, 2006). His description of psychomotor overexcitability could easily be taken for the hyperactivity-impulsivity dimension of ADHD:

> Real difficulties begin with the transition to systematic learning. The largest number of children receiving a negative grade for behavior are from this group. These children fidget in their seats, disturb their classmates, shoot scraps of paper and metal nibs, find thousands of reasons to leave the classroom, and display an excessive mobility of attention. After class, and sometimes during class, they initiate fights, and most often take part in them and in other psychomotor excesses. Among boys, excelling in being independent, inclined toward rebellion in school, we are most often dealing with those with psychomotor overexcitability. (p. 7)

Our discussion of the overexcitabilities in this chapter has been tailored to gifted students, but we feel it is important to point out that not all students who experience heightened responsiveness to stimuli will be identified as intellectually gifted. Also, Gallagher (2013) concluded that a minority of intellectually gifted students form a cluster who do not demonstrate overexcitability, preference for intuition, and openness to experience. This minority illustrates the heterogeneous nature of giftedness. The overexcitabilities look different based on their combination and strength, and there is overlap between certain types and diagnosable conditions, such as ADHD. In contrast with the OEQ, the Overexcitability Questionnaire-II (OEQ-II) is a self-report instrument consisting of 50 items (the five types of overexcitability are equally represented), scored using a 5-point Likert scale. Research on overexcitability using the OEQ-II and instruments that measure the hyperactivity-impulsivity and inattentive dimensions of ADHD has shown that there is a strong relationship between psychomotor, imaginational, and sensual overexcitabilities and ADHD (Rinn & Reynolds, 2012).

There are no accommodations for an Individualized Education Program (IEP) or Section 504 available in schools for overexcitability, but we can better understand how to find the positive aspects of ADHD, ASD, and other developmental conditions based on Dabrowski's ideas and his theory. The overexcitabilities can still be accommodated informally by parents and professionals. A diagnosis can be a useful tool, but the overexcitabilities offer a way of understanding the lived experience of intensity without the pathologizing lens of a deficit model.

As a child psychiatrist, Dabrowski acknowledged that sometimes the overexcitabilities require clinical interventions, and he wrote that the psychomotor type may require pharmacological treatment. This position was made clear only in his Polish works. We want to emphasize in this chapter that Dabrowski was a proponent of mental hygiene, and he believed that parents, educators, and clinicians could work together to provide a healthy and appropriate environment for children that would foster a positive developmental path.

Asynchronous Development and Overexcitability

In Dabrowski's (1938/2019) earliest writing he described the uneven development of highly gifted children. The overexcitabilities in his theory were differentiated into types and also into levels, with increasing complexity at higher levels. Silverman (2013) described the complexity inherent in the asynchronous development of the gifted and how it impacts their lives. The overexcitabilities are

a part of the definition of giftedness as characterized by asynchronous development. Asynchrony may exist not only in regard to peers but also within the child.

Asynchronous development is highly individual, and it is easy to forget that a child who is highly advanced compared with their age peers intellectually may struggle with a deeply asynchronous inner experience in which they feel alone and misunderstood. Working with children to uncover the sources of their challenging behaviors is not easy, but it creates an atmosphere in which students are granted agency in the process and their autonomy is nurtured.

Dabrowski saw the overexcitabilities as causing a disruption in adaptation to the environment, and each type has its own challenges in the classroom as well as in other settings. This difficulty in adaptation creates both internal and external conflict for a child. Another issue related to overexcitability is a low tolerance for frustration. The types of overexcitabilities possessed by a child dictate the ways that these reactions will appear—whether they are related to an excess of energy, seeking comfort in food or affection, emotional outbursts, a deep imaginational process, or asking questions. Rarely do these types appear in isolation, and this is especially true in a child who is intellectually or creatively gifted.

One of the foundations of Dabrowski's theory is his construct of multilevelness, which is more than viewing different levels of personality development. He was aware that there is enormous complexity in human life and that the overexcitabilities contribute to experiencing life in a deeper and more complex way than experienced by those without them. Individuals who experience the overexcitabilities perceive the world differently, and this contributes to their feeling of being out of sync with the world around them. Twice-exceptional students who both are gifted and have a disability are the most asynchronous, and these children often require a great deal of help to learn to live with their differences (see Chapter 17 by Silverman, this volume, which covers asynchrony).

Accommodating Intensities (Overexcitabilities)

Psychomotor Intensity

In a Denver preschool, children endowed with high levels of energy, instead of being forced to sit still in their seats and become progressively restless, were allowed to move around and use their hands. Having an outlet for their excess energy, they were able to focus well and learn (Tucker & Hafenstein, 1997).

Sensory Sensitivity

In some children, emotional and sensory sensitivities are so high that noise, overpowering smells or tastes, or very bright lights can be extremely upsetting. If it is not possible to take the child out of the offending environment or to remove the distressing stimulus, buffers such as dark glasses or earmuffs can be helpful to lower the level of stimulation (Probst, 2008).

At the other extreme is sensory seeking, in which a child craves stimulation through the senses. This is the classic sensual overexcitability described by Dabrowski and includes children who require regular hugs, chew on their clothes or other objects, or enjoy strong odors and search them out. Providing a safe outlet for sensory needs, sometimes called a sensory diet, is critical for helping these children focus and transform this energy successfully.

Intellectual Intensity

Many gifted children have a hard time stopping their endless thoughts in order to go to sleep. Techniques for slowing down and quieting their mind (e.g., visualization, counting, relaxation exercises) may be helpful. Some gifted children use a form of meditation that leads them to a peaceful and joyful state (Piechowski, 2001, 2014). Even young children can benefit from 5-minute meditations that can be progressively extended to 20 minutes (Murdock, 1978).

Imaginational Intensity

A child with a vivid imagination may be upset by images seen on television, scary movies, stories in the news, or sensational gossip. To help children distance and distract themselves from these frightening images, the disturbing image can be replaced with a more positive picture, or the "bad images" can be put into a strong file cabinet and locked away.

Children with strong imaginational intensity must be helped in learning how to take control of their visualizations. They sometimes torment themselves using their visual imagery and even create alternate worlds where they suffer (Wells, 2017). There are exercises available to help guide children in using their imaginations in a safe and healthy way. An example is the psychosynthesis exercises discussed in Piechowski's (2014) book *"Mellow Out," They Say. If I Only Could* (2nd ed.), which includes a description of how to use this method.

Emotional Sensitivity and Intensity

For children who are easily overwhelmed, crowded and noisy places, new situations, or long, drawn-out events can lead to emotional overload. These kinds of situations are best handled with advance preparation. Proactive interventions, such as explaining the nature of the occasion, the people involved, and the general flow of the event, can remove the uncertainty that is often a source of anxiety and stress. Physical interventions, such as holding the hand of an understanding adult, soaking in a warm bath, or having one's back rubbed, are also effective ways of soothing to restore emotional equilibrium.

Accommodating the overexcitabilities is not synonymous with making excuses for a child's behavior. Greene's (2014) Collaborative & Proactive Solutions (CPS) model is useful for working with this population because it is grounded in empathy and honoring the child's autonomy. Although gifted children often astonish adults with their intellectual abilities, it is important to remember that they are still developing. One of the benefits of applying Greene's CPS model to gifted children who struggle with emotional intensity is that it allows for the acknowledgment that all children have some skills that lag behind. Rather than viewing an emotional child as manipulative, willful, or defiant, adults can change their lens and instead collaborate with the child to determine the source of their challenging behaviors (Greene, 2014).

Self-Compassion and Learning to Live Intensely

Talking with children and adolescents about the overexcitabilities can help them learn to accept these characteristics as an aspect of their developmental potential rather than negative characteristics or symptoms. Diagnoses such as ADHD do not always follow an individual throughout the lifespan because symptoms can change, and they do not necessarily continue meeting clinically significant levels. It is possible for a highly active child to be diagnosed with ADHD during elementary school but no longer meet the threshold for such a diagnosis by high school, or the subtype might change from hyperactive-impulsive to combined type (including symptoms of hyperactivity-impulsivity as well as inattention). Helping a child with strong psychomotor overexcitability understand their high energy level as something to harness and use for their benefit is a way to positively reframe what might otherwise feel like a problem.

One important reason for educating young people about their excitability and propensity to react intensely is to help them remember that there is a reason for the depth of their feelings when things get difficult. Overexcitability at its core is a very strong reaction to stimuli, and this can lead to dangerous or impulsive behaviors in young people who feel distraught. Dabrowski's earliest writing was based on his study of self-mutilation and suicide, and in this work, he showed a connection between the overexcitabilities, emotional tension, and intensity of experience (Dabrowski, 1937; Piechowski, 2014). This connection has also been found in research where strong overexcitabilities were present in young adolescents who died by suicide (Cross et al., 1996, 2020).

There are a variety of methods for helping gifted youth deal with the less pleasant manifestations of overexcitability. For instance, Gaesser (2018) described the benefits of using Emotional Freedom Techniques as an anxiety management strategy. Another way to cope with anxiety is through mindfulness exercises, and Sisk and Kane (2018) have shared many useful ideas for working with gifted children in this area.

Multilevel Development in Adolescence

From the earliest outline of his theory, Dabrowski emphasized two types of developmental processes, which he termed unilevel and multilevel. By unilevel, Dabrowski meant that there is no universal hierarchy of values present, and values are seen as changeable and without a criterion of deciding higher versus lower values. For Dabrowski, values were a key indicator of one's emotional growth. A multilevel process means becoming aware of the subjective, inner realities of others and of other dimensions and levels of reality. It involves a restructuring process—an inner transformation—that he called "disintegration":

> The course of multilevel disintegration is accessible to objective study and the experiencing individual is conscious of it. The process of evaluating one's own internal environment is essential for multilevel disintegration. The feeling of the separateness of one's own self increases and this is so not only in contradistinction to the external environment, but also, even primarily, in relation to one's own inner environment, which is evaluated, is made into a hierarchy, and becomes a subject of more precise cognition and appraising thought. A "subject-object" process takes place in one's own self. One's internal milieu is divided into higher and

> lower, into better and worse, and into desirable and undesirable. (Dabrowski, 1967, p. 69)

Multilevel development emerges from strong overexcitabilities, as well as other aspects of what Dabrowski called developmental potential, including special talents and abilities and dynamisms. The dynamisms are actually the products of certain types and combinations of overexcitabilities. Here one can see the process of positive disintegration in action during adolescence, and it can be intense and turbulent. The initial multilevel disintegration is spontaneous, and it emerges directly from emotional overexcitability. Strong feelings of guilt and shame, and feelings of disquietude and dissatisfaction with oneself, are some examples. There is a questioning of the self, one's values, the meaning of life, and one's place in the world. At this point, the individual experiences a vertical split between their higher and lower self. This produces inner turmoil—an existential crisis—that necessitates action in order to resolve the conflict.

Multilevel disintegration in adolescents can include characteristics such as periods of depression and anxiety, emotional lability, and feelings of unreality. Disparities in social differences, such as a lack of mirroring from true peers or unshared experiences among available age peers, can lead to discomfort and a feeling of being out of place (Jackson & Moyle, 2009a). Eye-opening case examples of adolescents in growthful crisis are described by Jackson (1998), Jackson and Moyle (2009a, 2009b), and Jackson et al. (2009).

Research Insights Into Multilevel Development

The first research on overexcitability in the gifted in the United States was conducted with a longer version of the questionnaire provided in Figure 4.1. It picked up not only examples of the five types of overexcitability, but also evidence of both unilevel and multilevel processes in adolescents. The hallmark of multilevel development is complexity—in the words of gifted teenagers, adults can see their depth of processing (see Piechowski, 2014, for numerous examples). Chapter 15 in this volume on the exceptionally gifted, by Hutchens and Morelock, provides some insight into how the complexity inherent in extraordinary intelligence lends itself to a multidimensional experience of reality. Although the overexcitabilities are the raw materials of multilevelness, they do not necessarily translate into a multilevel process.

An example of the difference in cognitive complexity between unilevel and multilevel processes in adolescence can be seen in studies of epistemology. Gallagher (2019) studied the changes in epistemological reasoning in gifted and typically developing adolescents, and a unilevel process is seen in young people

who engage in dualistic thinking, as well as in the second and third stages of reasoning, which include multiplicity and contextual relativism, respectively. It is not until the highest stage in her study, commitment without relativism, or dialectic, that a multilevel cognitive process is at work. These students display a complexity in their thinking and a need for integrating interdisciplinary perspectives, as well as a desire for mentors to guide their learning journeys.

Bailey (2011) studied the developmental process in gifted adolescents and found that the majority of gifted students are in the unilevel range. Out of 70 participants, only eight responded with answers illustrating the presence of a multilevel disintegration process. This shows that even among gifted populations, multilevelness is not a given, and the evidence may not be obvious to outside observers. This is a deeply personal process of inner growth, and it can be detected by asking questions that probe one's emotional and cognitive depths using instruments based on Dabrowski's constructs.

Dabrowski recognized that a multilevel process in adolescence may not be noticed by a counselor who lives life in a unilevel process. The theory of positive disintegration is not a stage theory, and it does not unfold in a linear fashion with a guarantee of reaching a multilevel process. Typically developing adults, who do not themselves experience life through a multilevel lens, may miss the complex processes of development presented in the theory of positive disintegration. Even when adults themselves do not easily perceive a multidimensional and multilayered reality, they must provide the right conditions to cultivate the multilevel progress for adolescents going through positive disintegration. These young people require great empathy and understanding, and safe places to explore their thoughts and feelings.

Conclusion

There are many characteristics that make gifted students different from their typical age peers. In this chapter, we have described five areas of intensity and sensitivity, known as overexcitabilities, found in Dabrowski's theory of positive disintegration. Unfortunately, behaviors associated with these traits are often viewed as abnormal or problematic, especially when a child is under stress and the traits—with their resultant manifestations—become accentuated. When that happens, parents, teachers, and school staff become increasingly frustrated, and the child becomes increasingly distressed.

We have addressed the issue of how overexcitability overlaps with diagnosable developmental disorders and mental health conditions. In literature discussing the misdiagnosis of gifted children, there has sometimes been a misunderstand-

ing perpetuated that, for instance, the hyperactivity associated with ADHD is somehow different than the hyperactivity sometimes present in a gifted child with psychomotor overexcitability. In fact, these are not different types of motor activity, and we mean to correct that misperception here in this chapter. The difference is that psychomotor overexcitability is much more than hyperactivity. Dabrowski viewed psychomotor overexcitability as a broad construct at many levels, and therefore it sometimes manifests as hyperactivity, but it can also be transformed into the energy that drives talent. Twice-exceptional children who are both gifted and diagnosed with ADHD or ASD can be helped by learning more about what overexcitability means from Dabrowski's perspective. Offering an alternative to pathologizing intense experience can be the difference in helping a child not feel broken.

Dabrowski developed a theory that can be viewed as a forerunner to the current neurodiversity movement. He saw that talented, creative people often possess a sensitivity and intensity that can look like mental illness. Instead of pathologizing these characteristics, it makes more sense to recognize them as naturally occurring variations with corresponding strengths. To help both the children *and* the adults who work with them, it is crucial to appreciate the interplay among the child's situation, intensities, and temperamental traits. With understanding comes the possibility of a more accepting and accommodating environment. After all, adults don't ask athletes to slow down, but provide space and equipment to help them develop their exceptional potential.

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CHAPTER 5

The Use of Intelligence Tests in the Identification of Gifted Children

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This chapter considers the use of intelligence tests in the identification of gifted students. The chapter content is appropriate for all professionals involved in gifted identification, directly or indirectly; however, this narrative highlights elements of intelligence and gifted identification procedures that may be especially germane to school counselors, especially those who work in elementary and middle schools, where the majority of gifted identification occurs.

THE HISTORY OF INTELLIGENCE TESTING AND GIFTED IDENTIFICATION

To fully appreciate the use of intelligence tests in gifted identification, counselors should have an understanding of two primary historical themes: the history of intelligence as a psychological construct and the history of intelligence tests used in the identification of gifted students. This subsection will deal with both topics briefly, although there are many resources that address both topics in detail elsewhere.

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Brief History of Intelligence

Although intellectual assessment was initiated in France to address an applied educational need, theoretically minded researchers had long been asking the basic question, "What is intelligence?" Charles Spearman (1904), the psychometrician known for developing the statistical procedure known as factor analysis, reported that among the collection of cognitive tasks he analyzed with his newfound statistical procedure, a unifying factor reliably emerged no matter how many measures he included in the process or the nature of the cognitive tasks he investigated. He called this dominant factor *g* or general intelligence, which he proposed was the primary intellectual ability underpinning all cognitive activity.

Years later, Thurstone (1938) argued that *g* was largely a statistical artifact. Using more advanced factor analytic procedures, Thurstone proposed that intelligent behavior arose not from a single general factor, but from several independent constructs, or primary abilities. Thurstone's primary abilities comprised seven specific domains of ability, including word fluency, verbal comprehension, spatial visualization, number facility, associative memory, reasoning, and perceptual speed. In the book *The Structure of Human Abilities*, Vernon (1950) attempted to reconcile Spearman's and Thurstone's conflicting theoretical approaches and outcomes by demonstrating the existence of a hierarchical arrangement of intelligence, with Spearman's general factor (*g*), which accounts for the largest source of the variance in intelligence, at the apex of the hierarchy. Below *g*, Vernon demonstrated, were several major, minor, and specific group factors, including those proposed by Thurstone.

By the late 1950s, psychologists had largely accepted that intelligence was as Vernon (1950) proposed—multifaceted and hierarchical, underpinned by a strong, unifying general factor. Such a hierarchical view of intelligence continues to be the dominant theory today, although the number of primary abilities viewed as important has increased, and psychologists have come to recognize that an additional tier (or more) of ever more specific cognitive attributes are likely subsumed beneath the second level of primary intellectual abilities. This latter contribution to the theory of intelligence is referred to as the *Three-Stratum Theory* (Carroll, 1993, 2005), which has been expanded by McGrew and Flanagan (1998) and Flanagan et al. (2013), as well as others.

Today, most academics who study intelligence agree that the construct is hierarchical in nature, underpinned by a dominant general factor followed by ever more specific primary, secondary, and tertiary factors. To say that there is a dominant general factor is to recognize that this statistically demonstrable factor accounts for the predominant share of variance in all cognitive measures, with factors at each successive lower level accounting for ever scarcer amounts of variance

associated with ever more specific cognitive skills and abilities. In most intelligence tests, the general factor is represented by the total test score, or the Full Scale IQ (FSIQ). For decision-making purposes, the FSIQ not only accounts for the most variance generated by the test, but also is the most reliable, comprehensive representation of a student's overall level of intellectual functioning and the best overall predictor of life events and outcomes. As such, FSIQ is used most often in gifted identification as the best representation of students' global cognitive functioning, although partial scores taken from comprehensive tests are sometimes parsed by examiners to represent gifted functioning in specific or unique ability areas.

Myths Put to Rest

This author would like to dispel three historical myths about intelligence that have been empirically put to rest decades before but persist in the minds of many educators. That is, (a) the myth that intelligence is fixed and immutable, (b) the belief that intelligence is innate (i.e., solely inherited), and (c) the contention that intelligence tests measure a person's intellectual or cognitive capacity or potential. Research over the decades has shown that intelligence is a highly stable construct, but it is subject to some change over time due to influences in the environment or changes in the person (e.g., physical, emotional)—that is, intelligence is not fixed or immutable; it can and does change over time. Secondly, "nature-nurture" oriented research has long considered whether intelligence is an inherited condition (i.e., nature) or whether intelligence is a result of one's environment (i.e., nurture). The consensus among researchers is that a large portion of intelligence does in fact appear to be inherited, but just the same, intelligence is malleable and influenced substantially by environmental conditions (e.g., socioeconomic status, amount of stimulation provided during critical developmental periods). The interaction between the portion of intelligence that is inherited and the experiences one has throughout life ultimately determines a person's current level of functioning. Finally, intelligence tests do not measure human capacity or potential. Humans are incapable of determining in any meaningful way what any person's true cognitive *capacity* or *potential* might be. Rather than assessing capacity or potential, intelligence tests provide an estimate of a person's current level of functioning, although the reader should note that assessed intelligence tends to be quite stable over time and predicts more life events than any other single construct measured within the social sciences or education.

Brief History of Gifted Identification

Alfred Binet, a member of the French Free Society for the Psychological Study of the Child, was appointed with other society members to the Commission for the Retarded with the charge of determining how best to assess schoolchildren and a goal of identifying students who were lower functioning who might benefit from special education practices. Binet published *L'Etude Experimentale de l'Intelligence* (Experimental Studies of Intelligence) in 1903, which described the methods he devised for assessing intelligence. In 1905 Binet, with one of his students, Theodore Simon, published the 30-item Binet-Simon Test of Intelligence, the first practical test of intelligence and the forerunner of the venerable Stanford-Binet Intelligence Scale, now in its fifth edition (SB-5; Roid, 2003). Although H. H. Goddard brought the Binet-Simon scales to the United States and translated the test into English, Lewis Terman (1916) at Stanford University developed the instrument further and published the Stanford Revision of the Binet-Simon scale. The test's popularity grew exponentially as a tool for identifying and better understanding the characteristics of students who were intellectually gifted.

The name of Lewis Terman, more so than any other researcher except possibly Leta Hollingworth, became synonymous with the study of the intellectually gifted (Silverman, 1992). Using the Stanford-Binet scales for identification, Terman investigated and categorized the characteristics of gifted students in a longitudinal manner, attempting to understand whether there was merit to the commonly held perceptions of gifted students as maladjusted, socially awkward, physically weak, and prone to illness. His research showed convincingly that gifted children on average were in good health, had normal personalities, and were socially adroit—findings supported by 21st-century research as well (Bracken & Brown, 2006, 2008). Terman also found that those students in his gifted study went on to become generally successful in their careers, marriages, and adult lives—also illustrating the importance of intelligence as a predictor of life events. Because of his work, Terman advocated for the early identification of gifted children in the belief that gifted youth, if identified early, could be appropriately educated and directed toward a successful life.

Leta Hollingworth also relied on the Stanford-Binet in the identification of gifted students; however, Hollingworth was interested in the characteristics of highly gifted individuals (i.e., IQs above 145). Enviably, Hollingworth had at her disposal the entire catchment of the New York City school system from which to gather her sample, which due to its size and diversity allowed her to study students with IQ cut scores as high as 160, and even as high as 180 (Hollingworth, 1942). In addition to studying highly intelligent youth, Hollingworth is also recognized

for studying the role of females in society and demonstrating the comparability of incidence rates for giftedness across gender groups.

Terman and Hollingworth (Hollingworth et al., 1940) foreshadowed the meritocratic view supported empirically a half-century later by Arthur Jensen (1998) and the authors of *The Bell Curve* (Herrnstein & Murray, 1994)—a view that had become generally unpopular in the latter decades of the 20th century and continues to be discounted in the early 21st century. Increasingly, the field of education has adopted an egalitarian philosophy that promotes the contention that "all children can learn" and further that "all children are gifted in their own ways." Such an attitude dismisses and minimalizes the distinction between those students who are among the brightest and most talented and those with lesser abilities and gifts. Emphasizing the meritocratic view, Hollingworth et al. (1940) highlighted the profound relationship between one's intelligence and their relative contribution or detriment to society by suggesting that:

> More and more it is realized that "the mass of men," those finding their place in the middle 50 to 60 percent of all who are born, create no special problems for themselves, educational, social, economic, moral, or legal. As a group, men of normal (average) intelligence, the "mass of men," tend neither to create social problems, nor to solve problems created by the forces of the environment. It is the intellectual deviates who create for mankind the great problems of crime, dependency, unemployment, and like difficulties; and who, on the other hand, in the extreme plus degrees of deviation, introduce innovations, evolve civilized life for all. (p. 43)

After Terman and Hollingworth described in detail the characteristics of gifted students, the field began to treat the correlated attributes they and others discovered as causal factors. Eschewing intelligence, the field increasingly focused on the known characteristics of gifted students (e.g., fascination with atlases and encyclopedias, early philosophical interest, early onset reading, language precocity) as surrogates for direct assessment. Such a shift from assessing intelligence directly to inferring its presence by cataloging its known correlates incrementally inched the field away from using the construct of intelligence as the central criterion for identification, and "intellectually gifted" gradually became more egalitarianly thought of as a more subjective condition, that is "gifted and talented." Among the more egalitarian-oriented proponents, the use of intelligence tests in the identification process had increasingly become unpopular, with some in the field advocating that alternative identification procedures replace the

tried-and-true method—thereby supplanting the most objective and empirically defensible identification procedure with increasingly less direct, more subjective, nebulous, and debatable methods.

Proponents of alternative identification paradigms proposed that with proper consideration, more students, through their "gifts and talents," could be identified in more ways, and advocated for more varied assessments and identification procedures in search of latent gifts and talents (i.e., the egalitarian philosophical belief that all people are gifted or talented). Rather than relying primarily on intelligence test scores for identification, proponents for alternative assessment methods proposed that multiple identification criteria could broaden the selection process, thereby netting a larger selection of gifted and talented students from the referral pool.

Alternative procedures for identifying gifted students have included observing students' behaviors in learning situations (Passow & Frasier, 1996), using dynamic assessment procedures (Feuerstein et al., 1986; Kirschenbaum, 1998), using teacher-completed rating scales (e.g., McCallum & Bracken, 2018; Pfeiffer & Jarosewich, 2003; Renzulli et al., 2013) and behavior rating scales (e.g., Bracken & Brown, 2006, 2008), and considering students' interests and characteristics. In the past 2 decades both performance-based and portfolio approaches have gained favor and are included in several states' identification guidelines (Stephens & Karnes, 2000). Beyond objective behavioral identification methodologies, the use of more subjective approaches toward identification, such as case studies, peer or self-nomination, specialized checklists, student products, and analyses of specific cognitive/language skills, have reportedly increased the numbers of students identified as gifted, including more students from ethnic, racial, and socioeconomic minorities (Bernal, 2002; Orfield et al., 2000). By diversifying the identification approach, in combination with the assessment of intelligence, the collection of students who are identified as gifted also has become more diverse (Bracken et al., 2007), which many believe has been good for the students identified and the programs that serve them.

Putting Intelligence Back Into Giftedness

The advocates for alternative identification procedures do not form a unitary voice; they are as diverse as the procedures for which they advocate. Several researchers continue to advocate for the equitable and primary use of intelligence tests in gifted identification (e.g., Bracken & McCallum, 1998, 2000; Bracken & Naglieri, 2003; Lohman, 2006; McCallum, 2003; McCallum et al., 2001; Naglieri & Ford, 2003, 2005), believing that intelligence, fairly assessed, is the hallmark of the condition known as "intellectually gifted."

As a result of having no federal definition of giftedness, combined with the widespread adoption of an egalitarian philosophy and the frequent use of alternative assessment and identification procedures in the schools, it is fairly common to find "gifted classes" throughout the United States that include students with mean IQs of around 115, a level of intellectual functioning that is significantly lower than what the pioneers in the field would have considered as intellectually gifted (e.g., Bracken et al., 2007). By suggesting that intelligence be put back into gifted identification, this author is merely suggesting that any definition of gifted should first and foremost be based on the product of an intelligence test, preferably the total test score (e.g., Full Scale IQ), while the inclusion of additional measures of attributes, interests, and behaviors should be supplemental.

Intelligence Tests

Since the proliferation of intelligence testing after World War I, a vast number of ability tests have been developed to serve a variety of populations (e.g., infancy through adult), settings (e.g., clinics, schools, military), and purposes (e.g., screening, diagnosis, placement). Tests of cognitive abilities (i.e., ability tests, intelligence tests) used in the identification of gifted students can be classified into several useful categories. All tests of ability fit into one or more of the following categories.

Individual Versus Group-Administered Tests

Intelligence tests can be either individually administered or group administered. Individually administered ability tests (e.g., SB-5 [Roid, 2003], Universal Nonverbal Intelligence Test–Second Edition [UNIT-2; Bracken & McCallum, 2016], Wechsler Intelligence Scale for Children–Fifth Edition [WISC-V; Wechsler, 2014]) require extensive training and appropriate state licensure to administer. These tests, which generally take one or more hours to administer to a single student in a clinical setting, provide an in-depth analysis of the student's diverse intellectual strengths and weaknesses. Individually administered tests are the most comprehensive and inclusive measures available to assess students' intellectual functioning.

Group-administered tests, on the other hand, such as the UNIT–Group Abilities Test (UNIT-GAT; Bracken & McCallum, 2018), can be administered to an entire class of students in a single sitting by a teacher trained in its administration. Administration often requires less than an hour of class time—sometimes as little as 20 minutes (e.g., UNIT-GAT). Group ability tests typically do not yield

the same depth or breadth of information obtained from the individual administration of a comprehensive intelligence test, but group tests serve as useful gifted screening measures.

Unidimensional Versus Multidimensional Measures

Some ability tests assess a diverse collection of intellectual abilities and characteristics, while others focus on the assessment of general ability or a limited subset of specific intellectual skills. The Woodcock-Johnson Tests of Cognitive Abilities–Fourth Edition (WJ-IV; Schrank et al., 2014) measures a very broad array of cognitive abilities, but the Raven's Progressive Matrices (RPM; Raven et al., 1998) assess only general intellectual functioning through a collection of very similar abstract spatial items.

Some gifted programs allow admission based on a student's superior performance on a total test score (e.g., FSIQ), or some number of its subordinate part scores (e.g., scales or subtest scores). A multidimensional measure of ability provides practitioners with a total test global ability score, as well as a diverse collection of part scores (i.e., scales, indices, subtests), which in combination may facilitate identifying students with superior unique, as opposed to global, abilities. As indicated previously, the RPM provides only a single score for interpretation, and whatever the global ability assessed by the RPM is, it will dictate whether a student is identified as gifted or not—sometimes resulting in a fairly narrow definition of giftedness. Test users should consider, however, that as a result of *the indifference of the indicator* (Jensen, 1992; Spearman, 1927), tests that are highly valid measures of general ability, regardless of the unique methods by which they assess *g*, tap into the construct previously described as being the foundation of intelligence (i.e., general intelligence). Thus, any of these unique, high-*g* measures can be considered as interchangeable in their ability to assess general intelligence.

Verbal Versus Nonverbal Tests

Throughout the history of intelligence testing, practitioners have recognized that some tests are not well-suited for some examinees because of the conflicting demands of a test's administration requirements and the unique characteristics of examinees. No one would question the assertion that a visually presented ability test would be inappropriate for a blind student, or that a verbally administered test would be inappropriate for a student who is deaf; however, many students with various language-related issues or disabilities are administered language-loaded intelligence tests annually (Bracken & McCallum, 2000), putting them at a dis-

tinct disadvantage (Cummins, 1986; Ortiz & Dynda, 2005). That is, these students may lack the ability to express their intelligence effectively due to their lack of facility with the English language or because of other language-related issues.

Paralleling the history of general intelligence test development has been a lesser known history describing the development of nonverbal intelligence tests (Hassett et al., in press; McCallum et al., 2001). For example, the original Binet scale was published in 1904, paralleled by the first nonverbal intelligence test (i.e., the Seguin Form Board; Seguin, 1907) that was published in 1907.

During World War I, the U.S. Army Mental Tests (National Research Council Subcommittee on Methods of Examining Recruits, 1918) included an alternative nonverbal form (Army Beta) to complement the standard verbal form (Army Alpha) and better accommodate recruits who spoke English as a second language or for those who were illiterate. For linguistically limited examinees, a language-loaded test creates a subtle test bias in the form of "construct irrelevant variance." That is, when examinees' language skills interfere with the assessment of the target construct (i.e., intelligence), their test performance is diminished by their inability to understand verbal test directions or respond cogently to questions asked. Examinees for whom language-related construct irrelevant variance is an issue would benefit from the administration of nonverbal tests (i.e., removing the source of irrelevant variance to better assess the target construct).

Populations for whom nonverbal tests are appropriate are expanding within and across the United States. According to the U.S. Census Bureau's 2010 Census data, more than half of the U.S. population will be considered part of a minority race or ethnic group by the middle of the 21st century. Specifically, the largest population growth is predicted for non-Hispanics of two or more races, non-Hispanic Asians, and Hispanic populations. Meanwhile, the non-Hispanic White population (of children) is projected to decrease by 23% between 2014 and 2060. Because immigrant parents often have multiple children, there is a greater increase among ethnically and racially diverse children relative to adults. Researchers predict that 64% of children by 2060 will be members of various ethnic and racial minority groups (see Colby & Ortman, 2015).

In the identification of gifted students, an issue of equity and fairness surfaces along these lines as well. The issue is this: For every person who has a communication or language-related limitation, whether due to acquiring English as a second language, a learning disability, or auditory difficulties (e.g., hard of hearing, deafness), all tests first are language tests, no matter what construct the test is purported to measure. That is, before a person's intelligence can be accurately assessed, that individual first must be sufficiently fluent and capable in the language used in the test directions and test items to be able to express their intelligence. Nonverbal intelligence tests were developed as a means of removing the

obstacle of language in the assessment of cognitive functioning for individuals with language-related problems.

Unfortunately, many "nonverbal" intelligence tests still employ verbal directions in the administration of the test (i.e., requiring examinee verbal comprehension) and sometimes in the required mode of response (i.e., requiring examinee verbal expressive abilities). The Reynolds Intellectual Assessment Scales (RIAS; Reynolds & Kamphaus, 2003) is one such test. Among the RIAS scales is the Nonverbal Index, which the authors present as a nonverbal measure of cognitive abilities; however, the RIAS nonverbal scale includes subtests that are presented with verbal directions and require verbal responses from the examinee (Bracken, 2005). In contrast to the RIAS, the Universal Nonverbal Intelligence Test (UNIT-2; Bracken & McCallum, 2016) and the Wechsler Nonverbal Scale of Ability (WNS; Wechsler & Naglieri, 2006) are administered in a 100% nonverbal manner; that is, there are no verbal directions and no verbal responses. To administer the UNIT-2, examiners use a standardized series of gestures and demonstration items to convey the nature of task demands necessary to complete each subtest; the WNS uses a cartoon-like set of drawings to convey the test's task demands.

Another more recent controversy addresses the extent to which nonverbal tests, and particularly nonverbal intelligence tests, have met the goals of their authors (e.g., predictive capability, fairness). For example, Flanagan et al. (2013) noted that nonverbal tests have limitations (e.g., nonverbal instruments typically assess a narrower range of abilities and may not provide the same power to predict academic performance as verbally laden instruments do). They concluded their review of nonverbal assessment by recommending that nonverbal tests should be considered as one component of a more comprehensive assessment. Naglieri, however, provided a spirited defense of nonverbal tests, especially their predictive capabilities and their use for helping to identify gifted students from ethnic-racial minorities (Naglieri & Ford, 2015).

Pairing Intelligence Tests and Rating Scales

Some researchers have advocated for pairing methodologies in a consistent manner to provide a more comprehensive identification procedure, employing multiple measures and multiple respondents. One such pairing of methodologies is the combined use of the UNIT-GAT (Bracken & McCallum, 2018) and the Universal Talented and Gifted Screener (UTAGS; McCallum & Bracken, 2018).

The UNIT-GAT is a cognitive screener appropriate for ages 5 to 21 years and 11 months. The authors of the UNIT-GAT offered a rationale for its development and theoretical and statistical support for its use in the test manual and in a chap-

ter within the *Handbook of Nonverbal Assessment* (Moore et al., 2017). Designed for group administration, the UNIT-GAT is a user-friendly screener that consists of two subtests that assess analogic reasoning and quantitative reasoning. Each subtest has a time limit of 10 minutes and is easily scored with dichotomous items (i.e., pass/fail). The UNIT-GAT provides standard scores, descriptive classifications, and percentile ranks. An Analogical Reasoning Index, a Quantitative Reasoning Index, and a Full Scale IQ also can be obtained from the UNIT-GAT. The Full Scale IQ describes the examinee's performance quantitatively and qualitatively, and is the most reliable source of data yielded from the UNIT-GAT. Although considered a nonverbal assessment, the UNIT-GAT does include brief verbal instructions for group administration. UNIT-GAT psychometric properties are consistently high for the total normative sample of 1,605 students (Alpha $r = .92$ to .95).

The UTAGS (McCallum & Bracken, 2018), intended to be paired with the UNIT-GAT, screens potentially gifted students in six behavioral areas associated with successful school performance: cognition, creativity, leadership, literacy, mathematics, and science. Elevated performance in these areas characterizes students who may be gifted and/or talented. The UTAGS is a theoretically sound, research-based rating scale used to identify students' ability strengths and weaknesses in a quick, accurate, and cost-efficient format.

The UTAGS normative sample consists of 2,492 students, ages 5 years and 0 months through 17 years and 11 months, residing in 22 states. Importantly, the demographic characteristics of the sample are consistent with the U.S. population parameters, as reported in the *Statistical Abstract of the United States* (U.S. Bureau of the Census, 2010). Reliability coefficients (Alpha) for 12 selected subgroups within the normative sample all exceed .90; total sample reliabilities range from .98 to .99. These consistently high alphas demonstrate that the UTAGS is equally reliable for all subgroups investigated and support the premise that the test is accurate regardless of the examinee's gender, race, ethnicity, and exceptionality status.

Examiner Training Requirements

The last issue to be discussed in this chapter related to the use of intelligence tests for the identification of gifted students is the degree of training required to administer tests. States and test publishers tend to agree on levels of training or licensure required to administer certain tests. Typically, states require that professionals graduate from specific programs of study and hold designated university degrees before they may administer or interpret some of the more complex tests, which tests publishers refer to as Class C tests.

Class C tests generally include all comprehensive, individually administered intelligence tests, such as the UNIT-2 (Bracken & McCallum, 2016), WISC-IV (Wechsler, 2003), Kaufman Assessment Battery for Children–Second Edition (Kaufman & Kaufman, 2004), and the SB-5 (Roid, 2003). Tests that are less theoretically complex, briefer and simpler to administer, often group administered, and easily interpreted (Class B tests) may be administered by school counselors, classroom teachers, gifted education coordinators, and others who have been trained specifically to administer, score, and interpret those tests. The UNIT-GAT (Bracken & McCallum, 2018), Naglieri Nonverbal Ability Test–Second Edition (NNAT-2; Naglieri, 2007), Raven's Progressive Matrices (Raven et al., 1998); Cognitive Abilities Test (CogAT; Lohman & Hagen, 2001), or the Bracken Basic Concept Scale–Third Edition (BBCS-3; Bracken, 2008) represent a few commonly used Class B tests for gifted identification. The UNIT-GAT, NNAT-2, RPM, and CogAT are all group administered, whereas the UNIT-2 and BBCS-3 are individually administered.

In most settings, Class B tests, especially those that are group administered, are favored for gifted identification because large numbers of students can be assessed efficiently by the school counselor or classroom teacher. Class C tests, on the other hand, are typically administered by school psychologists and are reserved for cases in which a student may have been close to meeting school criteria for gifted but not quite, and school personnel believe a more comprehensive, individual assessment would yield a more definitive indication of the student's current level of intellectual functioning.

Conclusions

Historically, intelligence tests have been the single most important criterion in the process of identifying gifted students. That preeminent position has been undermined in recent decades due to an egalitarian philosophy in public education that has promulgated the belief that all students are gifted or talented in their own right. Broadened identification methods based on this egalitarian belief have influenced the number, diversity, and nature of students who are currently identified and enrolled in gifted programs. Although it has increased the diversity of students in gifted programs, the use of alternative procedures has reduced the mean IQ of a typical gifted class to a level below the Superior range of ability and closer to the High Average range.

Counter to the egalitarian philosophical approach to gifted identification is the meritocratic use of intelligence tests in the identification process, at least as the central identification measure. Intelligence tests accurately, objectively, and

reliably discriminate the brightest students from those students of average intelligence, and the use of nonverbal ability tests in combination with alternative procedures may facilitate the identification of students from racial and linguistic minorities (Bracken et al., 2007). As any classroom teacher will attest, all students should be treated equally, educated with equal effort, and cared for equally, but not all students are in fact equal in their abilities. Given a normal distribution of ability, it is clear that not everyone can be above average! Only a relatively select few students rank at or above the percentiles associated with gifted functioning, whether the criterion used by a district is the 90th or the 99th percentile.

The lack of an agreed-upon or federal definition of giftedness and efforts to more equitably represent students from ethnic-racial minorities in gifted education has resulted in a proliferation of nontraditional methods and procedures used in the identification process, including an increased use of nonverbal tests of ability. Sensitivity to students' language and cultural differences through the use of nonverbal tests has increased the proportion of students from racial, cultural, and linguistic minorities identified as intellectually gifted. However, the inclusion of nontraditional students whose cognitive strengths may not lie in the verbal (i.e., English) domain has diversified gifted classrooms and necessitated the inclusion of broader classroom experiences and content beyond traditional verbally oriented activities (e.g., reading of advanced literature). Emphases on creativity, spatial/quantitative skills (e.g., architecture, astronomy, mathematics), and biological sciences may be natural extensions of gifted classroom activities that might better accommodate students identified through nonverbal means.

School counselors often are the possessors of students' records and the screeners of students' abilities based on state-mandated academic assessments. School counselors frequently serve as the conduit for initiating, receiving, or routing gifted student nominations. Moreover, school counselors may be actively involved in the screening process by administering Class B group or individual tests of cognitive ability. Additionally, school counselors may be the conduit for referring known high-ability students to the district school psychologist for a comprehensive intelligence test in cases where a more definitive assessment of ability is required. To effectively participate in the process of identifying gifted students, it is essential that school counselors understand the nature of intelligence as a construct, its importance in the prediction of academic achievement, and the types of tests and procedures that might best be used in their school's gifted identification process, especially to identify gifted students from diverse backgrounds (Bracken et al., 2007; VanTassel-Baska et al., 1991).

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CHAPTER 6

Neuroscience and Giftedness

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One of the most fundamental aspects of giftedness that directly impacts both services and policy in education may also be the most well-studied construct of ability within the field and in modern neuroscience—namely, the measurement and qualities of an individual's general scholastic ability: *intelligence*. A great deal of disagreement and debate surround the notion of intelligence, largely due to significant implications of a person's general mental abilities and potential to achieve. The assumptions and consequences that result from the measurement of general aptitude not only affect school achievement, but also often influence one's opportunities for success in society (Johnson et al., 2006). With this in mind, we first establish a definition of the construct *general intelligence*, informed by human neuroimaging methods.

Charles Spearman developed the concept of general intelligence, or *g*, as an explanation for the moderate to high correlations between different standardized mental tests (Spearman, 1904; Woolfolk, 2019). Spearman (1904) conceptualized *g* as the mental energy necessary for cognitive performance. In his view, the tasks that make up intelligence tests, such as verbal and spatial exercises, require specific skill. But the kinds of each of these tasks included in most intelligence tests have moderate to high positive correlation with one another, suggesting a common mental resource used in varying degree across these different domains. One persistent interpretation of this definition suggested that the amount of gen-

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eral intelligence that an individual possessed varied in the same way it did in more or less cognitively demanding tasks (Shaw, 2007). This concept, based on individual differences, is now more widely accepted due to the fact that it explains between 40%–50% of the total variance of assessments of mental ability. Deary et al.'s (2010) review article on this topic provides a modern definition of intelligence that aptly facilitates an exploration of the empirical evidence in that it shows the complexity surrounding an initial articulation of general intelligence. In their review, the consensus definition of intelligence from among 52 scholars reads as "a very general capability that, among other things, involves the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly and learn from experience" (Deary et al., 2010, p. 202). The incorporation of multiple types of cognitive abilities into this definition illustrates the point that general intelligence supports and influences a variety of cognitive skills. Even so, the general factor of intelligence resembles a cloud—the attempt to grasp it or reify it, in order to examine it closely as an element, rejects its nature. This is particularly important in the discussion of the neuroscience of giftedness, as we do not mean to suggest that *g* is the only approach to examining giftedness, although it has received the most scrutiny among interested neuroscientists.

Consequently, recent developments in neuroscience methodologies provide new avenues of inquiry into general intelligence. Scientists since the 1800s have been convinced that the brain possesses a key to the accurate measurement of intelligence (Gould, 1996). Even with changes in the methods and assessment tools available to modern neuroscience, the positive correlation between intelligence and the physical size of the brain is not a revelation. The development of neuroimaging techniques such as voxel-based morphometry and functional magnetic resonance imaging (fMRI) provide a valid basis for these claims and provide the opportunity to correlate the volumetric differences of specific brain regions with measures of general intelligence (Haier et al., 2010; Jung et al., 2010). These new imaging techniques provide scholars with two distinct approaches to understanding human cognitive abilities. Some scholars posit that individual differences in intelligence can be found in a specific structure of the brain, while others explore the possibility that intelligence is distributed throughout the brain and can be traced to differences in specific but systemic cognitive processes.

A Question of Structure or Function?

Flashman and colleagues (1997) reviewed prior studies that compared physical measurements of the head and brain to IQ scores with resulting correlation coefficients ranging from .08 to .51. This modest correlation suggests an account

of general intelligence in brain structure; however, other physical properties, such as the height of the individual, also undoubtedly influence the physical properties of the head and brain. Flashman et al. collected both general and regional measures of brain structure in order to provide more comprehensive correlation data. The findings of this study suggested that although there were significant regional correlations with IQ, general intelligence is not necessarily "located" in these regions because multiple cognitive tasks are required to complete an IQ test. This report demonstrated that regional differences in structural brain volume do correlate with *g*, but not necessarily with the localization of function.

In contrast, Duncan et al. (2000) asserted, "*g* reflects the function of a specific neural system primarily involving a specific region of the lateral frontal cortex" (p. 459). Flashman et al. (1997) used the Wechsler Adult Intelligence Scale–Revised to measure IQ. Although the authors analyzed the verbal and performance components of the IQ test separately, as well as using the full scale test, they focused primarily on how various IQ scores correlated with the organization of the whole brain, as well as to the specific structures. Duncan et al. (2000), on the other hand, specifically compared items that required high-*g* involvement with items specifically created to counterpoint with low-*g* involvement, not the IQ assessment as a whole. The researchers employed factor analysis to determine which tasks most correlated with *g*. This study used positron emission tomography (PET) to contrast brain activation during tasks with high-*g* involvement with corresponding low-*g* control tasks. The outcomes showed that lateral frontal and anterior cingulate regions are selectively recruited by high-*g* tasks. These regions support executive function processes, such as self-monitoring, inhibitory control, action choice, sequencing, prioritizing, and analogizing (Carter et al., 1999; Duncan & Owen, 2000; Geake & Hansen, 2005, 2010; Hedden & Gabrieli, 2010). Beyond the findings of their own study, the authors referenced prior research that found similarities in mental performance between participants with frontal lobe lesions and participants from the lower portion of the *g* distribution, further supporting the theory of a particular neural system affiliated with general intelligence.

Another article addressed the conclusions that Duncan et al. (2000) made by returning to the consideration of structural correlation to general intelligence. In response to the suggestion that general intelligence reflects the function of a specific and restricted neural system, Haier et al. (2004) asserted that in some brain regions, including the frontal lobes, *de*activation is actually associated with better mental performance, a fact more readily true for subjects with higher scores on standard intelligence tests. Deactivation occurs during tasks that require little effort from the individual and is also representative of a persistent resting state of the functional brain (Thomason et al., 2008). Deactivations can confound inferences from fMRI studies because of the assumption that task involvement

and performance are dependent upon increased effort and additional metabolic energy (Kalbfleisch, 2008). This information makes the association of general intelligence with a specific neural network more complex than previously understood. One drawback of functional brain imaging studies—that results and inferences drawn from them must always consider the context of the specific tasks used—makes inconsistencies between studies difficult to resolve.

To reduce the complexity of the inquiry and perhaps the argument, Haier et al. (2004) stated, "to the extent that individual differences in general intelligence have a structural component, examining structural correlates of intelligence would eliminate any task-related influences from consideration" (p. 425). Thus, Haier et al. (2004) used voxel-based morphometry (VBM) to characterize brain areas in college-aged participants, correlating gray and white matter volume ratios with the Wechsler Adult Intelligence Scale (WAIS) IQ test to determine if the areas correlated with *g* clustered in the frontal lobe or distributed throughout the brain. Their results supported the idea that individual differences in gray and white matter volumes in specific distributed regions account for a large portion of the variance in individual differences in general intelligence (Haier et al., 2004, p. 431). Even within this distributed regions model, the strongest conjunction gray matter findings from this study were consistent with the same areas in the frontal lobe that Duncan et al. (2000) proclaimed important for general intelligence. In this study, gray matter volume primarily correlated with general intelligence. The authors suggested that heritability helps to explain individual differences in regional gray matter volume. In essence, this study proposed a complex interaction between areas of high gray matter volume and areas of high white matter volume, both of which correlate with general intelligence and consequently manifest as higher scores on intelligence tests. This article also suggested that young adults show different patterns of interaction than older adults, a finding that implies brain development has a significant impact on processes of general intelligence. The authors also suggested that gray and white matter volumes in the areas accounting for variance in general intelligence provide a potential explanation of individual differences in cognitive strengths and weaknesses. In other words, patterns of gray and white matter volumes in areas of import may restrict which areas are able to work together most efficiently (p. 432). In light of these findings, it is important to understand the mental processes most closely related to *g*, working memory, and fluid intelligence, and how they interact (Nisbett et al., 2012).

What Is Fluid Intelligence?

Theories of intelligence treat fluid intelligence as the counterpart of crystallized intelligence. Crystallized intelligence is "the ability to solve those more

familiar kinds of problems that can be solved through the routine use of heavily overlearned cognitive routines" (Gong et al., 2005). To support this description, in a study searching for the neural underpinnings of fluid intelligence, Gray et al. (2003) stated, "fluid intelligence is a major dimension of individual differences and refers to reasoning and novel problem-solving ability" (p. 316). The first quote suggests that crystallized intelligence relies heavily on recall, routine, and familiarity. Memorization and repetition are broad examples of crystallized intelligence in action. In contrast, fluid intelligence is described as the ability to react to new or novel problems. Critical thinking and problem solving can be evidence of fluid intelligence. How does this idea relate to the neurological term *plasticity*? It is necessary to explore this construct more fully to understand its role in giftedness and influence on *g*. Gray et al. (2003) used fMRI to measure brain activity while participants performed tasks designed to examine working memory. This study sought to determine if individual differences in fluid intelligence are mediated by attentional control mechanisms on a neural level. The task they used, called an n-back task, used a 3-back design to measure working memory and the ability to quickly recognize a stimulus as matching or not matching previous stimuli. For example, the participant must be able to recall an item observed three back from the presented item. This study used either all words or all faces during each trial. The target match replicated the stimuli (word or face) 3-back (A-B-C-A). In other words, there were two nonmatching stimuli between the target stimuli. The case of A-B-C-D would be considered nontarget. This design also allowed for the researchers to incorporate "lures," or when stimulus matched at a 2-back, 4-back, or 5-back rate. These lures created interference in the task, allowing researchers to measure brain activity supporting attentional control. Before entering the scanner, each participant completed a standard psychometric measure of fluid intelligence, the Raven's Advanced Progressive Matrices (Raven, 1947).

Differences in fluid intelligence were most evident on lure trials, those that involved attentional interference. The study also reported that brain activity in the lateral prefrontal cortex and parietal cortex mediated the degree of fluid intelligence during task performance. These findings are in line with inferences suggested in Duncan et al. (2000) as previously discussed. Gray et al. (2003) concluded that their study accords with previous research providing evidence that the lateral prefrontal cortex, an area Haier and colleagues (2004) found to be under significant genetic control, is a region that is central to the neural basis of fluid intelligence. The authors submitted that individual differences in fluid intelligence are most easily seen in behavioral measures of attentional control, suggesting that fluid intelligence may largely be the amount of metacognitive control an individual has over their attention.

It is difficult to assert from these findings that giftedness amounts to cognitive attentional control. However, the combination of (a) individual differences in fluid intelligence best observed during tasks requiring attentional control, (b) activation in the lateral prefrontal cortex during these tasks and similar to previous studies of the neural basis of *g*, and (c) the findings from Haier et al. (2004) regarding gray matter density in these same areas of activation suggests the neural mechanism of fluid intelligence as a candidate for the root of individual differences in general intelligence. A study on the shared genetic basis of fluid intelligence and brain morphology revealed an overlap of fluid intelligence onto brain areas that feature heavily in language acquisition and expertise, and asserted that language systems are part of the ultimate biological underpinnings of fluid intelligence (Ge et al., 2019). These conclusions broaden a neural account of giftedness, providing a basis for other observed cognitive strengths related to giftedness that lie outside of crystallized intelligence and skills of pure recall.

It is important to note that although genetic influences on the lateral frontal area of the brain have been documented, fluid intelligence is not completely determined by heredity, as other studies have shown behavioral interventions can positively influence students' levels of intelligence (Gray et al., 2003; Kalbfleisch, 2017).

Another study informed by structural findings related to intelligence (Gong et al., 2005) used VBM to pursue the relationship between frontal lobe volume and fluid intelligence. This study separated the constructs of fluid and crystallized intelligence (verbal intelligence) to further explore the correlation with gray matter density in the lateral frontal cortex. Gong et al.'s aim was to determine whether fluid and crystallized intelligence correlated differently with the size of the brain regions (particularly in the frontal lobes) after correcting for age-related changes. The study found that fluid intelligence decreased with age, while crystallized intelligence did not. Additionally, gray matter concentration in discrete regions of the parietal lobes and prefrontal cortex also declined with age, clearly demonstrating the correlative connection between gray matter density and fluid intelligence. Scores on crystallized intelligence tests were not found to correlate with the brain volume of any region. After controlling for age, the volume of the medial prefrontal cortex showed positive correlation with fluid intelligence, supporting previous findings by Duncan et al. (2000) and Gray et al. (2003). Taken together, these three studies suggest that individual differences in fluid intelligence link to gray matter volume in this distinct region of the frontal lobe (Gong et al., 2005), although Gong et al. (2005) warned against drawing this conclusion for two main reasons. First, *g*, by definition, must influence crystallized intelligence as well as fluid intelligence, and thus far the neural foundations that have been associated with fluid intelligence do not correlate to crystallized

intelligence. Last, it remains unclear why other regions of the frontal cortex are activated during tasks involving fluid intelligence but have thus far not been found to correlate with fluid intelligence measures (Gong et al., 2005, p. 1183). Neuroscience studies increasingly show how sensitive the brain is to context and that multiple systems poise themselves to support cognition based on input from internal affective systems, the external environment, and the demands of the task (Kalbfleisch et al., 2007, 2013; Smith et al., 2013). For instance, one of the long-standing neuromyths of the brain is the famous left brain versus right brain idea. Kalbfleisch and Gillmarten (2013) set out to reconcile the neuromyth and the popular debate over the expertise of the brain's left hemisphere versus the right. In doing so, they found that in any instance where *g* or domain-specific expertise were documented factors, that across those studies, both hemispheres of the brain were highly engaged no matter the skill. Thus, a functional signature of giftedness, or what Kalbfleisch and Gillmarten termed a "neurology of giftedness," emerged as a byproduct of dispelling this false belief about brain function once and for all.

In a study aimed at extending the knowledge of the neural systems supporting fluid intelligence, or "thinking on the fly," Kalbfleisch et al. (2007) examined the effects of task difficulty and response correctness on distributed neural systems encompassing the whole brain. The authors use the term *fluid reasoning* to mean the act of using fluid intelligence: "fluid reasoning is a type of learning ability. It influences how fast and how much someone learns, including their ability to manipulate and use information in the reasoning process" (Kalbfleisch et al., 2007, p. 71). This definition is operational and refers to the same construct in a more active sense. Kalbfleisch et al. argued that previous fMRI studies into fluid reasoning fail to provide accurate circumstances for the assessment of fluid intelligence. They observed that the methodological requirement of fMRI to scan subjects who have been pretrained to attain expertise on this task violates the natural process of fluid intelligence. Pretraining is done in order to assure a strong task activation signal in the brain, but that benefit limits the ability to ever truly provide a novel task or reasoning conditions similar to those in real life. To combat this limitation, participants were not exposed to problem-solving items prior to the scan and received only 20% of the amount of time typically required to solve matrix reasoning problems during scanning (Kalbfleisch et al., 2007). Thus, participants had all of the information they needed to solve the problem, but with insufficient time for reflection.

When participants were presented with this real-life simulation of deadlines and novelty, the neural networks involved in fluid reasoning were shown to be more highly distributed than in the previous studies, an interaction of multiple neural processes influenced by task difficulty and internal levels of uncertainty. This distributed system not only identified the lateral frontal cortex, but also char-

acterized a dissociation between the left and right hemispheres where the left lateral frontal cortex supported task difficulty, while the right supported accurate problem solving. As findings from this study demonstrated, the lateral frontal cortex is connected via white matter that travels through the visual and parietal cortices to the dentate nucleus in the cerebellum. This tract, labeled the cerebrocerebellar system, has been written about theoretically as a mechanism for cognitive flexibility and higher level reasoning (Leiner et al., 1986; Middleton & Strick, 1994). As Kalbfleisch et al. (2007) stated in their conclusion, this finding suggests that the brain assesses its own accuracy on these tasks, and that the neural response for correct trials during problem solving was robust and distinct despite the fact that participants had no direct feedback about their performance during the task, providing an interesting perspective for future research on forms of giftedness heavily dependent on an array of skills that enable performance. This study was one of the first to characterize this system on a functional level in humans, the first to capture the neural impact of both the state of uncertainty and the processes of fluid reasoning, and the first to capture the neurophysiology of fluid reasoning across the entire brain. Summarily, their functional characterization also captured the neocortical system characterized in a recent meta-analysis as the parietal-frontal integration theory, or P-FIT (Basten et al., 2015; Jung & Haier, 2007). Gregory and colleagues (2016) found that an additional feature of the brain, its gyrification, or folding of the cortex, also correlates with general cognitive abilities and areas posited by the P-FIT model.

Of particular interest, the analysis of influences from task difficulty and correctness dissociates contributions from the middle frontal gyrus (bilaterally) from fluid reasoning (Kalbfleisch et al., 2007). This finding accords with articles previously discussed; however, this brain region is specifically associated with working memory, posing the question of how working memory differs from fluid intelligence.

What Is Working Memory?

A review on cognitive and neural models of working memory defines this process as the "temporary retention of information that was just experienced or just retrieved from long-term memory but no longer exists in the external environment" (D'Esposito, 2007, p. 761). In the face of ongoing debate about the specifics of the construct, this definition is widely accepted. In their study of the increased brain activity after direct training of working memory, Olesen et al. (2003) stated, "working memory is the ability to retain information during short periods of time" (p. 75). In this study, the researchers carried out two experiments during which healthy adults underwent 5 consecutive weeks of working mem-

ory practice. Participants were scanned while completing working memory tasks before and after the 5-week training (Olesen et al., 2003). In the first experiment, working memory tasks were designed to be easy in order to obtain a low error rate. Therefore, by design, there were no significant changes in accuracy after training (Olesen et al., 2003). The striking behavioral finding was that participants' reaction times decreased. In other words, the subjects completed approximately the same number of tasks correctly, but the time taken to respond to each task diminished after the training intervention. Participants were also given pre- and posttests on neuropsychological abilities that were not directly trained in order to determine the full scope of benefits from the working memory training. The intervention significantly improved the participants' performance on these tasks, and fMRI scans showed increased brain activity and increased interaction between the prefrontal and parietal cortices between the pre- and postscans (Olesen et al., 2003).

The second experiment differed from the first in two important ways: First, the working memory tasks were more difficult, allowing the researchers to observe an improvement in accuracy; and second, the participants were scanned five times throughout the training in addition to pre- and postscans (Olesen et al., 2003). This experiment showed significant increases in task accuracy, and it also confirmed the outcomes from the first experiment, namely a decrease in reaction times and an increase in brain activity in the prefrontal and parietal cortices. One important conclusion from this study is that brain activity is positively correlated with an increase in working memory capacity. Through observing increased brain activity in the prefrontal and parietal cortices, the authors correlated working memory with fluid intelligence and suggested general cortical plasticity as a possible explanation for this correlation. This increase in brain activity is also important, as some research suggests that brain activations decrease with practice. Olesen et al. (2003) explained that may be due to the difference between tasks involving crystallized intelligence, automation, or encoding into long-term memory, whereas this study specifically measured working memory (p. 78). This conclusion suggests that working memory is similar to or connected with fluid intelligence, as they both can be set in contrast to automation. Automation is used here to contrast with the idea of attentional control, a construct presented by Gray et al. (2003) regarding fluid intelligence.

Supporting the importance of attentional control, McCabe et al. (2010) examined the relationship between working memory capacity and executive functioning, the many cognitive functions that can be neurologically traced to the frontal lobe. The main finding from this study is that executive functioning and working memory are almost perfectly correlated (r = .97; McCabe et al., 2010). This correlation led the authors to propose the existence of a construct fundamen-

tal to both executive functioning and working memory, a construct they named *executive attention*. The authors described executive functioning in many of the ways we have been addressing fluid intelligence, although they asserted executive attention as fundamental to fluid intelligence. They conceded that more empirical research is needed to differentiate the theoretical underpinnings of the two constructs on a functional level (McCabe et al., 2010).

How, then, do these concepts fit together? Fluid intelligence is the ability to solve novel problems and to reason beyond specific training. Working memory capacity aids in this reasoning by allowing the retention of information and knowledge that is pertinent to the task at hand. fMRI demonstrates that these two constructs are correlated, as brain activation increases in the prefrontal cortex during the assessment of both cognitive functions. Executive attention was proposed to represent a construct underlying all executive functions and working memory, but how this differs from *g* remains unclear. Fluid intelligence and working memory are both highly correlated with one another and with gray matter density in the prefrontal cortex. This gray matter density is also correlated with individual differences in general intelligence, which suggests that gifted students possess high working memory capacity and high levels of fluid intelligence. Twice-exceptional students, however, may have cardinal weaknesses in some of these processes (Kalbfleisch, 2013, 2014). These constructs have been described through studies with adults, and it is important to examine the role of brain development on giftedness and vice versa.

Implications for the Developing Brain

In a study of 85 children ages 5–17 years, researchers used voxel-based morphometry to explore differences in gray matter development based on age, gender, and IQ (Reiss et al., 1996). Consistent with prior research, the authors found no observable change in total brain volume across age and gender, suggesting that total cerebral volume is attained by early childhood. The authors did, however, find significant gender differences in absolute cerebral volume, specifically that males tended to have approximately 10% more total volume than females. Further analysis revealed gray matter to be exclusively responsible for this difference in volume. The study also found a negative correlation between age and the variance in gray matter volume, although age does positively correlate with white matter volume. In general, gray matter volume decreases as children develop, while their white matter volume increases, although key differences in early patterns of gray matter development have been identified in children whose IQ is in the superior range (Shaw et al., 2006). This is particularly interesting when considering prior

studies that found gray matter volume to be more highly associated with general intelligence than white matter volume (Haier et al., 2004) and the most important for predicting variance in IQ (Reiss et al., 1996). A similar study also used VBM to analyze correlations between brain structure and general intelligence in a large group of children (Wilke et al., 2003). In order to better assess developmental influences, data from this study were analyzed using parametric comparisons between three age groups: young (91.2 +/14.6 months), medium (131.6 +/10.7 months), and old (185.2+/22.3 months). Wilke and colleagues (2003) found a strong negative correlation between age and gray matter volume, both regionally and globally. Interestingly, according to the data, this correlation is not linear, but is best represented by a third order polynomial function (Wilke et al., 2003, p. 207). In other words, the rate of change of the pruning process is not uniform throughout childhood, and gray matter volume actually slightly increases toward the end of childhood. In accordance with previous research, they found IQ positively correlated with global gray matter volume. In the whole-group analysis, the authors found that the correlation between IQ and gray matter volume was also best described by a third order polynomial function. When the relationship between IQ and gray matter volume was analyzed with regard to age groups, a correlation only existed in the older group. When measured separately, the IQ scores of the young and medium age groups showed no significant correlation to any of the variables in this study.

Although the correlative findings of this study are in accordance with the other studies discussed thus far, the understanding of this correlation in terms of a third order polynomial function is of great significance. This correlational characteristic serves as further evidence that the neural manifestation of general intelligence is wrought with complexity, in part because of the ambiguous nature of the construct, but also in part due to the multifaceted nature of brain development.

Shaw et al. (2006) set out to further understand the intricate connections between general intelligence and brain development, expanding on the findings of Wilke et al. (2003) when participants were organized into three groups (low, middle, high) based on IQ scores. Wilke et al. found that these classifications did not correlate with global gray matter volume, and they did not pursue the line of inquiry. Shaw et al., on the other hand, used a longitudinal study of children to suggest a relationship between an individual's level of intelligence and the changes in the thickness (gray matter density) of the cerebral cortex. This study split the sample of 307 children and adolescents into three groups based on IQ: superior, high, and average. The authors used structural MRI to map the development of cortical thickness of four distinct brain regions for these different groups over time. Between-group difference showed most prominently in the prefrontal cortex. Cortical thickness measures showed that the superior intelligence group

started with the thinnest cortex at age 7 and it rapidly increased in thickness, peaking around age 11. The average intelligence group on the other hand, started with relatively high cortical thickness, which either increased slightly, peaking around age 7 to 8, or steadily declined throughout the age range. The high intelligence group followed an intermediate pattern, but the trajectory was shaped almost exactly like that of the average intelligence group (Shaw et al., 2006).

Cortical thickness declined, overall, across IQ groups, and the authors mapped the rate of change in cortical thickness for the different groups. The average and high intelligence groups shared similar rates of cortical thinning, but these rates were significantly slower than that of the superior intelligence group. Therefore, not only did the superior intelligence group show a relatively rapid increase in cortical thickness, but also this was similarly followed by hastened cortical thinning or pruning (Shaw et al., 2006). These dynamics demonstrate a relationship between general intelligence and patterns of brain development. The authors proposed multiple possibilities for the underlying cause of these changes in cortical thickness, but further research is necessary before a specific cause can be confidently asserted.

In a large-scale 2019 study, no sex differences were reported among a sample size of more than 18,000 participants that included nearly equal numbers of males and females (Cox et al., 2019). The differences that emerged were patterns of variance that differed between middle-aged participants and elder participants. Ritchie and colleagues (2015) challenged the inspection of brain characteristics associated with *g* using various structural brain imaging methods. They found that brain volume and subsequent measures of cortical thickness (gray matter) and white matter hyperintensity accounted for the largest amount of the variance in the study. Because they subjected their data to multiple models and observed different outcomes, they offered an open question to the community about how and which neuroimaging measures account for individual variance and how to interpret findings with integrity.

Kalbfleisch (2009) reviewed the literature on intelligence, creativity, and twice-exceptionality to present a comprehensive treatise on the neural plasticity of giftedness. She discussed the interactions between these constructs as informing the overarching concept of giftedness and asserted that state of mind and the role of stress are as important to a construct of giftedness as the neural basis of cognitive processes that support performance. Her review supported claims made by previous literature that fluid reasoning is fundamental and essential to discussions of giftedness and asserted that other considerations, such as environmental influences on brain plasticity, affect an individual's ability to demonstrate giftedness. Her prior review on the functional neural systems of talent (Kalbfleisch, 2004) emphasized the need to account for the roles of goal-directed behavior

and processes as well as preattentive perceptual processes in the demonstration of talent and expertise. The talent construct was carefully chosen in order to consider the constructs of intelligence and creativity together, considering opportunities for discovery that might lie between them. This discussion recognizes that general intelligence or giftedness is much larger and more complex than one or a combination of a few cognitive processes. Kalbfleisch went on to describe twice-exceptionality, the concomitance of giftedness and a specific learning disorder in an individual, to further demonstrate that giftedness encompasses complexities not easily measured by modern science. Kalbfleisch and Loughan (2012) determined a method for psychometrically characterizing the phenomenon in highly functioning twice-exceptional children with autism based on a relationship between IQ discrepancy and executive function. Finally, Kalbfleisch (2009) discussed the creativity literature to support the importance of executive attention to giftedness and show the insufficiency of that construct to account for giftedness on its own. Multiple other constructs, such as motivation, emotion, and inspiration, combine to constitute creativity and giftedness. This amalgamation of factors can be understood as an individual's state of mind incorporating the roles of resilience and incubation. In sum, her review iterated the multitude of interactions that influence giftedness and proposed a general theory of giftedness that incorporates the neural plasticity of specific cognitive processes and affective influences. This complexity must be embraced in educational settings in order to cultivate the fullest potential of each student.

Soft Factors Influencing *g*

This section is devoted to "soft factors" influencing intelligence that appear in the brain. These relate to preference, disposition, belief, imagination and individual differences, and how they not only influence one's perceptions about life quality, but also give contextual input (both external and physical) to the brain as it reasons and solves problems and creates. For instance, the neural correlates of social rejection and pain are complex and network-based (Eisenberger, 2012). There is not one area of the brain that suffers in isolation during social rejection, but an entire system where physical and emotional pain separate and overlap among different brain regions like a moving Venn diagram. Although neuroscience studies have not been driven to understand social pain and empathy in the gifted, a particular sensitivity and sense of justice is one of the social and emotional hallmarks of giftedness. For better or worse, giftedness comes with heightened sensitivity that can leave students prone to feeling like outsiders or against the grain of the norm of their peers. Education sometimes undervalues

these social and emotional markers during the learning process, but aspects of emotional intelligence have been shown to provide a supportive response to stress and coping (Saklofske et al., 2007), even in a small sample of gifted adolescents (George & Shari, 2012). An understanding that the feeling or perception that takes a holistic hold on cognition is a human quality is essential to the appreciation that heightened sensitivity is not something to dismiss or overlook.

A factor not often featured in neuroscience studies of intelligence is interest. Students with high *g* and high interest in reading and math show the highest levels of competence in these two domains (Lechner et al., 2019). Dopaminergic systems in the brain influence motivation, interest, and readiness (Beninger, 2018; Renninger & Hidi, 2015). These systems exert the same chemical "imprint" on a learning moment that happens when someone suffers from addiction. Although the contexts are vastly different, this is a lesson that the brain uses the same system to process anticipation and create a ready state for learning whether the input is influenced by a substance or a learning opportunity (Kalbfleisch, 2021).

Going one step further, one's belief about ability and achievement can also influence performance for the better (American Psychological Association, 2015; Aronson & Juarez, 2012; Blackwell et al., 2007). Although several of the areas of the frontal lobes that are tied to the *g* construct are under heavier genetic control, it is a marvelous paradox of the brain that intelligence is malleable. Although a belief about one's ability in pursuit of a goal exerts a positive influence on achievement, new science presents an important counterpoint. A message emerging from educational neuroscience asserts that balancing intense goal-driven learning with time for using the imagination to create, problem solve, and envision the future is equally important for substantive thought work and artistic pursuits alike. When does that happen, and what does it look like?—mild procrastination, off-task behavior, and daydreaming (Kalbfleisch, 2021). Once again, although studies illustrating the importance of imagination and supporting time for that kind of processing are not based on studies in the gifted, these students are primed to benefit most from this emerging priority (Gotlieb et al., 2016; Kalbfleisch, 2021; Morsanyi et al., 2013). Studies on twice-exceptional gifted students also emphasize the importance of widening the understanding of learning processes and individual differences.

Twice-exceptionality has received scant treatment in the cognitive and neuroscience literatures primarily due to the bias that the variability among these populations is too great to be characterized (Kalbfleisch, 2014). Despite that assumption, a few studies examined specific types of twice-exceptionality primarily within the diagnoses of dyslexia (Berninger & Abbott, 2013; Gilger et al., 2016) and autism (Kalbfleisch, 2004, 2009; Kalbfleisch & Loughan. 2012). Neuroscience has helped determine and define the brain regions and networks

that are compromised in dyslexia (D'Mello & Gabrieli, 2018). It is now known that white matter pathways, which support the maturation of executive functions into the frontal lobes through the mid 20s, facilitate some domain-specific abilities associated with reading skill and some more general executive functions such as working memory (Niogi & McCandliss, 2006). These studies point to the fact that giftedness can express or promote expertise in specific domains (visual problem-solving speed in dyslexia, high verbal competence in stealth dyslexia, music and math expertise in autism), even when distinct aspects of the executive functions are compromised and may account for the slippage in intellectual performance, and even when the weaker skills are masked by talent (Kalbfleisch, 2013, 2014, 2021; Kalbfleisch & Loughan, 2012).

Conclusions

The majority of professionals involved in the field of education understand the importance of the concept of general intelligence. The concept of *g* has been controversial since Charles Spearman initially proposed it. Many have made claims about what *g* is and how it is manifested, but the underlying processes of the construct are still largely up for debate. That said, the development of tools that allow researchers to perform noninvasive observations of the brain while it is alive and functioning puts neuroscience at the forefront of finding answers to these questions. Although the question of intelligence originated as one of improving pedagogy, the first question that neuroscientists needed to address was whether general intelligence was attributable to brain structure or to brain function. Both opinions found supporting evidence from multiple studies, and it soon became clear that the intricacies of *g*, combined with the complexities of the human brain, require an interactive understanding of the relationship between these two characteristics of the brain and the construct of general intelligence.

Although many studies reveal that general intelligence is correlated with brain volume, further research demonstrates that, when examined by region, the correlation resides in a network of specific regions in the brain, not the least of which is the prefrontal cortex. Studies exploring *g* with respect to the developing brain support this emphasis on networks and interaction with regard to a "source" of general intelligence in the brain. Recent studies indicate that there are specific differences in the patterns of brain development that correlate to general intelligence. This relationship cannot be asserted as causal at this time, and even with the assumption of causality, it is unclear whether the specific pattern of brain development is the cause of higher general intelligence, or if the brain developed in that specific way as an effect of the presence of a higher level of *g*. Kalbfleisch

(2009) stated that "the brain should be thought of as a set of interacting networks that maintain homeostasis through dynamic interaction with the environment instead of as a hierarchy of processes that combine to create higher level cognitive function" (p. 281). The structures and processes of the brain should not be overlooked when investigating giftedness; however, their consideration should not be isolated from one another, but should be incorporated together to ascertain information about both the cognitive processes and affective states in play.

Many questions remain with regard to giftedness and general intelligence in the brain. Much of the available information from neuroscience about giftedness has proven confirmatory of most behavioral observations. Implications for counseling point to the following themes:

- Emerging knowledge about the nature of individual differences, particularly around the development of the executive functions, illustrates how neural systems and cortical support for certain cognitive processes may differ in children. Kalbfleisch (2017, 2021) provided substantive discussion and pragmatic interpretation about how and when abilities mask weaker or immature executive functions, and how to recognize and teach to those differences appropriately.
- Even though working memory varies individually and can be impaired in gifted students, it is important to understand that students all eventually "recover" from lapses in attention and working memory, so it is possible to bring students along to the same context during group learning (Kalbfleisch, 2021).
- What have been coined here as "soft influences" on cognition are actually drivers that influence the quality of the outcome as well as an individual's processing. The old adage that the journey is as important as the destination comes to mind.
- The ways in which social and affective neuroscience have normed social pain and empathy in humans writ large suggests that the characteristic sensitivities that distinguish gifted students are central to their identities and, over time, bridge their talents to their identities.
- A delineation in the research literature separates superior intellectual function as different from other levels, including above-average ability, on a physiological level. Why a biological difference may be more tolerable than a behavioral one is subject to the qualities of human nature. With a good foundation of research that exists about the construct of general ability, there is an adequate baseline point for exploring more complex neural systems related to giftedness in its many forms.

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CHAPTER 7

Introduction to Programming for Gifted Learners

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In this chapter, I will use the term *programming* to refer to "a continuum of services that address the interests, strengths, and needs of students with gifts and talents in all settings" (National Association for Gifted Children [NAGC], 2019), and the term *program* when discussing a specific identifiable program option, such as cluster grouping (Gentry, 2014). Despite many years of research, including a landmark study by the National Research Center on the Gifted and Talented (Delcourt et al., 1994, 2007), the field of gifted education has yet to determine the one specific program or service that allows all academically gifted students to make the greatest gains. At one time, schools may have had a specific program, such as self-contained classes or another program model specifically for gifted students, but over the last several years, specific programs for gifted learners have been frequently eliminated in favor of an inclusionary model that places all students in the regular classroom. Some of the reasons for this phenomenon are lack of funding and an appropriate infrastructure (Hodges, 2018; VanTassel-Baska, 2006). Furthermore, the passing of the No Child Left Behind Act (2001) and its policy that emphasized struggling learners also resulted in diminished concern for those at the high end of ability (Scot et al., 2009). The passage of a law or policy "is best viewed as a milestone in a much longer journey. Implementation of the policy, careful review of its intended and unintended consequences, and revision of that policy are part of a never-ending cycle" (Plucker et al., 2017, p. 214). With

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the reauthorization of the Elementary and Secondary Education Act at the federal level, called the Every Student Succeeds Act (ESSA, 2015), the field of gifted education rejoiced because many of the changes had the potential to benefit advanced learners, particularly those who have been traditionally underserved. However, there were no advocates for gifted students included on the committee that would advise the U.S. Department of Education on guidance for implementing the regulations. Thus, although there was some indication that ESSA might bring some new hope with its focus on the academic growth of all children, including those with gifts and talents, without specific guidance to states concerning implementation, the default program still often becomes differentiation of instruction for various learner ability levels in the regular classroom. Teachers may or may not have a clear understanding of differentiation, particularly with respect to students who are gifted, making services to these students minimal at best. To make appropriate recommendations for matching students who are gifted with suitable services, it is critical that school counselors have at least some foundational knowledge about programming for these students.

The Role of the Counselor

Callahan (2007) suggested the creation of a "Master Adult Triad" consisting of parent, teacher, and mentor as a way to support and nurture students who are gifted and from underserved populations. I believe that this concept can be extended to all gifted students, not just those from underserved populations. The school counselor can play a pivotal role as a member to coexist with or take the place of one of these triad members. From mathematics it is known that the strongest support comes from the triangle, and this three-legged stool can be the foundational support needed by these students. Using the triangle metaphor, it is clear that the school counselor can be a vital player advocating for and supporting the needs of gifted students.

In NAGC's (2019) Pre-K–Grade 12 Gifted Programming Standards, counselors are mentioned specifically in the description of Standard 6: Professional Learning:

> All educators (administrators, teachers, counselors, and other instructional support staff) build their knowledge and skills using the NAGC-CEC Teacher Preparation Standards in Gifted and Talented Education, (NAGC-CEC) Advanced Standards in Gifted Education Teacher Preparation, and the Standards for Professional Learning. . . . Educators frequently assess their pro-

> fessional learning needs related to the standards, develop and monitor their professional learning plans, systematically engage in coaching and learning to meet their identified needs, and align outcomes with educator performance and student curriculum standards.

The counselor may be the first line of defense when students who are gifted are deemed to be exhibiting negative behaviors or when their classwork is below what is expected for their abilities. Being able to look at the whole picture of the child, including their interests, learning profile, cultural issues, economic issues, and other information, may assist the counselor with determining if a different programming placement or a modification of the current placement is necessary. Thus, it is important that the counselor have a solid understanding of academic and affective characteristics and needs of students who are gifted to ensure there is a match between their needs and the programming that is being provided.

Programming: A Continuum of Services

Professionals in the field of gifted education advocate for a continuum of services rather than a single program to meet the needs of these students (Callahan, 2009; Callahan et al., 2017; Rogers, 2006; Tomlinson 2009; Treffinger et al., 2004). NAGC's (2019) Pre-K–Grade 12 Gifted Programming Standards emphasize a continuum of services as the programming exemplar. Moreover, the NAGC-CEC Teacher Preparation Standards in Gifted Education (NAGC & The Association for the Gifted, Council for Exceptional Children, 2013) underscore the need for teachers to know about many different program models, understand how these models meet the needs of specific groups of gifted students, and be able to implement these models effectively.

Professionals acknowledge that students who are gifted are not all alike. Some students are academically talented, some are intellectually gifted, and others have gifts and talents that lie in nonacademic areas. Some students are gifted only in mathematics, while others are gifted in language arts. A pull-out program for mathematically gifted students would not meet the needs of all of these learners, nor would a residential school for gifted students in the performing arts. If professionals look at a continuum of services that encompasses a wide range of offerings, from small modifications to the core curriculum in the regular classroom to early entrance into school or college, they have a better chance of finding the right service or set of services for each individual student.

What Makes Programming "Good"?

Before any discussion of various types of services, it is important to first look at the criteria for exemplary programming. Simply having a program or set of services for gifted students does not indicate the quality of that program. Too often a program may be operating as a patch to cover a weak general education program (Tomlinson, 2009) or an add-on that does not align with the general education curriculum (Robinson, 2009; VanTassel-Baska, 2009). Some districts have no programming at all, citing lack of funding, even though there are a number of services that can be provided for little additional cost to the district (Adams, 2009; Gentry, 2014; Tomlinson, 2017). Effective programs and services have the following clearly articulated elements: a philosophy, goals, a definition, an identification plan, a coherent curriculum, a scope and sequence, a professional development plan, and an evaluation plan (Eckert & Robins, 2016; Tomlinson, 2009). Furthermore, the services are aligned with the general curriculum; there is administrative support, oversight by qualified personnel, and communication among all stakeholders (Adams, 2009; Tomlinson, 2009). When all of these elements are in place and working effectively, exemplary programming has an excellent chance of solidifying for gifted students. The scope of this chapter does not allow the opportunity to focus on and fully discuss each programming element; however, for a complete discussion of these see Eckert and Robins (2016).

Types of Programming

Results from a survey of 1,566 school district personnel at the elementary, middle, and high school levels indicated that about a third of the districts did not have any particular framework to guide them in providing gifted programming (Callahan et al., 2017). Of those who mentioned a framework, differentiated instruction was the most frequently mentioned at the elementary and middle school levels, although differentiated instruction is actually not considered a theoretical framework. Others mentioned curriculum models or service delivery models. Clearly, there is not a consistent understanding of what is meant by the question, "What is your gifted program?"

Unified Program Design (UPD) is a framework conceived by Rubenstein and Ridgley (2017) to address how to provide a clear response to this question. They contend that to describe a program one must include information about both the delivery method and the curriculum. This distinction is consistent with the 2019 Pre-K–Grade 12 Gifted Programming Standards, which address both curriculum (Standard 3) and programming (Standard 5; NAGC, 2019). Having a schema

to categorize programming options and curriculum can help districts determine whether components are missing. For example, the CLEAR curriculum model (Callahan et al., 2015) by itself is not a gifted program, but when it is used as the basis for the curriculum used in an elementary pull-out program option, the district can now answer the question, "What is your gifted program?" This chapter will look at a variety of programming options with the understanding that without a clearly articulated curriculum model, the choice of a program option itself does little to provide students who are gifted with opportunities for growth academically.

Although there are many out-of-school opportunities that provide choice and challenge based on student interest and ability (e.g., Destination Imagination, MATHCOUNTS, private voice lessons), this chapter focuses discussion of programming on a broad set of services that are typically offered during the school day: differentiation in the regular classroom, cluster grouping, pull-out programs, self-contained classes, subject-based acceleration, and grade-based acceleration. Recent reports indicate that these programming options encompass the range of available offerings most often chosen by school districts to meet the needs of their gifted learners (Callahan et al., 2017; NAGC & Council of State Directors of Programs for the Gifted, 2020). Furthermore, in section 5.1.3 of NAGC's (2019) Programming Standard 5: Programming, educators are encouraged to "use multiple forms of evidence-based grouping, including clusters, resource rooms, special classes, or special schools." Regardless of the programming options being used, experts in the field agree that it is beneficial to keep students who are gifted together for a major part of their academic day (Kulik, 2003; Rogers, 2007; Steenbergen-Hu et al., 2016). There is research to support the notion that when gifted children are placed in increasingly homogeneous classes (e.g., self-contained vs. regular classroom), they often compare themselves to their academically gifted classmates, which may cause a lowering of their self-perception of their own academic competence (Delcourt et al., 2007), although others suggested looking at additional factors that may indicate otherwise (Dai & Rinn, 2008; Makel et al., 2012).

The instructional changes within the chosen programming option generally involve enrichment, acceleration, or a combination of the two. Evidence-based practice 5.1.1 of NAGC's (2019) Programming Standard 5: Programming provides guidance for the use of acceleration, and practice 5.1.2 encourages the use of enrichment. Acceleration allows the pace of the instruction to be changed to allow the gifted student to cover the required material faster (NAGC, 2019). Enrichment activities allow students who have mastered the grade-level material to study the topic in greater depth and breadth or at a more complex level while other students needing more practice continue to work with the regular or

grade-level curriculum. With the current emphasis on basic skills and standards, the regular curriculum does not generally offer the appropriate challenge that students who are gifted need to allow them to advance academically at a level commensurate with their abilities.

Differentiation in the Regular Classroom

Because services are provided to gifted learners in the regular classroom, there is not a need to hire additional teachers, making differentiation as a program option quite prevalent at a time when school budgets have been significantly downsized. Differentiated instruction is an approach and philosophy to teaching and learning that is proactive and flexible, and that provides multiple pathways for student learning (Tomlinson, 2018). The basis for this mindset is predicated on the notion that students bring to the classroom a variety of learner characteristics that teachers must recognize if they are to provide the most appropriate learning environment for all students. In some classrooms, instructional strategies, practice activities, content, products, and the learning environment itself are frequently modified for learners who struggle with the grade-level curriculum. However, in its broadest sense, differentiation involves modifying the content, process, product, learning environment, and affect to meet the needs of all learners, including gifted learners.

With more schools choosing differentiation in the regular classroom as the only service offered to gifted students, teachers are faced with the need to provide developmentally appropriate learning opportunities that provide choice and challenge for a wide range of students. Students should not be required to continually repeat something they have already learned; their learning activities should be engaging, meaningful, and worthy of their time (Tomlinson, 2018). Work that is engaging and meaningful for a gifted student is likely to be too difficult for other students. Thus, teaching the same material to all students at the same time often causes a situation where some students are bored because the material is too easy, and some are frustrated because the material being presented is too difficult. Bored gifted students may act out in class, choose not to do homework/classwork that covers material already mastered, or simply disengage from learning.

Note that differentiation is not a strategy; it is a mindset. In a school that uses differentiation as the program option for gifted students, all staff members must have adequate professional development to allow differentiation to be implemented appropriately. Teachers who differentiate to meet the needs of all students in the classroom have developed ways to manage a classroom where students are often working on different activities. Some students may be working independently, some may work in small groups, and others receive direct instruction from

the teacher. Some students are grouped by ability, and some by interest or learning profile. A crucial factor in implementing differentiation is time. Time is needed to preassess students, determine appropriate content and activities based on that assessment, and modify the materials in depth, pace, and complexity. Without the time and effort to carry out these vital tasks, the chances that the learning needs of the gifted students will be met in the regular classroom are slim. For further information on differentiation, see Tomlinson (2017, 2018) and Adams and Pierce (2006).

Cluster Grouping

Another option that occurs in the regular classroom and does not require additional teaching personnel is cluster grouping. In general, cluster grouping is defined as placing a group of gifted students, usually about three to eight children, together in their regular heterogeneous classroom with other students. The cluster is most appropriately placed in the classroom of a teacher who has been trained to meet the needs of gifted students (Gentry, 2014). Some experts on cluster grouping suggest that the ideal scenario is to place students who perform far below grade level in a different classroom so that no teacher has to differentiate for both ends of the exceptionality spectrum. The exception to such a placement is the child who is twice-exceptional (i.e., both gifted and having another exceptionality, such as a dyslexia); in that case, the child is placed in the cluster classroom (Gentry, 2014; Winebrenner & Brulles, 2008).

As noted earlier, research supports keeping students who are gifted together for a major part of their academic day (Kulik, 2003; Rogers, 2007; Steenbergen-Hu et al., 2016). It is important to note that merely grouping the gifted students in a cluster has little effect on their academic achievement; actually providing specific instructional opportunities and implementing clearly articulated curriculum that is challenging for gifted students is key to raising achievement (Gentry, 2014; Pierce et al., 2011; Rogers, 2007). As a rule of thumb, if the teacher has 30 students and six are in the gifted cluster, one fifth (6/30) of her instructional time should be focused directly on the students in the cluster (Rogers, 2007). Clearly, teachers will need to differentiate the instruction to meet the needs of the students in their cluster groups.

Advantages to cluster grouping include having a group of gifted students working together on appropriately differentiated curriculum for a major part of their academic day, alleviating some social and emotional issues by providing a peer group for these students, and providing full-time services to gifted students through a cost-effective model (Gentry, 2018; Winebrenner & Brulles, 2008; Winebrenner & Devlin, 1998). There is also research to suggest that noncluster

students in the cluster classroom make greater academic gains than nonidentified students in other classrooms; thus, this spillover effect can be advantageous to all students (Gentry 2014; Pierce et al., 2011; Winebrenner & Brulles, 2008). In this age of mandatory standardized testing and the frequent use of test scores as a measure of teacher quality, a reason often cited by school districts for not using cluster grouping is the perception by noncluster teachers that the cluster teacher's classroom will have higher test scores, thus giving the cluster teacher a perceived unfair advantage. For a discussion of specific cluster grouping models, see Gentry (2014, 2018) and Winebrenner and Brulles (2008; Brulles & Winebrenner, 2019).

Pull-Out Programs

Pull-out programs generally involve having gifted students leave their regular classroom to meet with a special teacher in a resource room elsewhere in the school building to take part in various activities, usually enrichment or extension, with their academic peers. In a 1985 study of gifted programs across the nation, Cox et al. found that more than 80% of them used the pull-out model. Almost 20 years later, in a survey of more than 4,500 elementary and middle school students, this model was the most common form of gifted programming (Swiatek & Lupkowski-Shoplik, 2003). More recently, a survey of more than 1,500 districts indicated that more than 50% of the districts listed a part-time pull-out program as their program option (Callahan et al., 2017). Hence, the mainstay of gifted programming for many years has been this programming option. Unfortunately, there is not a standard that would hold true for all pull-out programs. Students may meet with the resource teacher as little as 30 minutes once a week or as much as 3 hours per day. Some programs connect directly to the regular curriculum (e.g., students who are gifted in math are pulled out during math time for an alternate math program); other programs appear to have little alignment with the general curriculum and may simply focus on a topic such as critical thinking.

Because there is no typical program and available studies do not often look at program effectiveness, it is difficult to study the effects of pull-out programs on achievement. One exception is Vaughn et al.'s (1991) meta-analysis examining nine pull-out program research studies that actually measured their effectiveness for gifted students. The results indicate that, when the regular curriculum was extended through the pull-out program/resource room model, there were significant positive effects for the variables of achievement, critical thinking, and creativity. In a large national study of four programming options, Delcourt et al. (2007) found that the strong academic focus of the pull-out programs in the study contributed positively to the students' academic achievement, supporting the earlier findings of Vaughn and colleagues (1991). Rogers's (2007) synthesis of

research on educational practices indicated that pull-out programs with a strong academic focus had an effect size of 0.65. Pull-out programs that provide a sustained academic focus rather than a smorgasbord of unrelated activities have a better chance of effecting positive academic growth in gifted students.

There are other factors that must be considered when choosing the pull-out option. Both the teacher to whom the student is assigned and the resource teacher must communicate effectively with each other. Having a popcorn party or a special recess when the gifted students are gone for services tends to undermine the pull-out program. Another source of irritation is the practice of having the gifted students make up all of the work missed while they were in the resource room. Having the pull-out program clearly aligned with the regular classroom curriculum helps to keep these issues at bay. Adams (2018) provided guidelines aligned to the NAGC programming standards for use in establishing and evaluating pull-out programs. The pull-out program can serve as an important piece in meeting the academic needs of gifted students; however, educators and decision makers must be cognizant that gifted students are gifted all day, every day, and offering them programming for only 30 minutes once a week cannot possibly provide all of the support they need for academic growth commensurate with their abilities.

Self-Contained Classes

Self-contained classes for gifted students allow them to be grouped together for academic subjects for the majority of the school day, although they may interact with other students at specific times, such as lunch or physical education. Unless the self-contained classes are for one or two subjects only, such as math or language arts, students who are placed in this option must have strong academic and intellectual profiles in almost all academic areas. As with cluster grouping, it is not just being assigned to a self-contained class that makes an academic, social, or emotional difference for the gifted students. Instead, it is the actual instruction the student receives within the self-contained class that can effect change. Placing gifted students in self-contained classrooms without specific curriculum and instruction that reflect the pace, depth, and complexity needed for these students to make academic gains is a waste of time and resources.

Rogers (2007) found that the effect size for this programming option was 0.49 at the elementary level and 0.33 at the secondary level. In a study that examined cognitive and affective outcomes for elementary students across four different program types (Delcourt et al., 2007), the gifted students in the self-contained classes made greater academic gains than gifted students in the heterogeneous classroom. Although self-contained classes appear to have a strong impact on the academic growth of gifted students, the drawback for many districts is a financial

one; funding is needed to hire additional personnel who have the ability to teach gifted students on a full-time basis, to purchase additional supplies and materials that are different from what is used in the regular grade-level classes, and to allocate classrooms dedicated to the self-contained program. An often-heard complaint of this programming option is that gifted students will gain an unrealistic picture of themselves, their abilities, and society because they are consistently around other students like themselves. By scheduling opportunities for all students within a grade level to interact in heterogeneous groups, the charge of elitism can be expelled.

Subject-Based Acceleration

Subject-based acceleration or subject skipping is most often employed when a student has demonstrated outstanding growth and understanding in a subject area in the grade-level curriculum. Offering enrichment and extension activities no longer allows the student to make academic progress commensurate with their abilities. Accelerating students may simply involve placing them in the particular subject at the next grade level. Other forms of subject acceleration include taking advanced classes through precollegiate Talent Search sites, independent learning, or distance education.

An advantage of subject-based acceleration that occurs within the school is that additional resources are not generally required. Classes at Talent Search sites, independent study involving an outside source, and distance learning may require out-of-pocket expenses on the part of the student's family, the school, or both. Once subject acceleration has been implemented, it is too late to worry about what happens the next year and in the future. A discussion about having a fourth-grade student take fifth-grade math needs to include a thoughtful conversation about the student's next year when, as a fifth grader, the student may have to be transported to the middle school for sixth-grade math.

The effect size for subject acceleration in Rogers's (2007) study of acceleration and grouping management strategies was 0.59 across 21 studies. As with other forms of acceleration, some educators' long-held beliefs about the certainty of problems with the social and emotional aspects of students who have been subject-skipped conflict with the findings from research on acceleration. *A Nation Deceived*, compiled by Colangelo et al. (2004), sought to change negative attitudes and beliefs about acceleration and present it as an inexpensive, viable option for gifted students. The report set the record straight on the advantages of the various forms of acceleration in an easily understood manner. The most recent update, *A Nation Empowered* (Assouline et al., 2015), still stresses that acceleration is the most effective and low-cost academic intervention for students who

are gifted. Despite these reports and other research on the benefits of acceleration (Neihart, 2007; Steenbergen-Hu & Moon, 2011; Steenbergen-Hu et al., 2016), acceleration does not rank at the top of options that were selected by schools in the Callahan et al. (2017) study, and only ranked in the top three options in grades 1–6 in the 2020 report of a survey of state directors of K–12 gifted programs by NAGC and the Council of State Directors of Programs for the Gifted.

Lourdes: A Gifted Student in Middle School. Consider the case of Lourdes, a student in Mr. Jackson's sixth-grade language arts class. Lourdes is a quiet girl who has had some trouble making friends in her new school. Her family has just moved to Indiana from Arizona over the summer. Although Lourdes speaks English quite well, Spanish is always spoken at home. Mr. and Mrs. Sanchez, her parents, contacted Mr. Jackson when Lourdes repeatedly complained about being bored in language arts class. She felt the reading materials weren't challenging and the activities she was required to complete did not allow her to use critical thinking skills commensurate with her abilities. Mr. Jackson was surprised to hear that Lourdes was bored. He saw Lourdes as a low-performing student because she was not completing homework and was often reprimanded for not paying attention. When the Sanchezes broached the subject of acceleration, Mr. Jackson was emphatic that Lourdes needed to stay in sixth-grade language arts. He reiterated that Lourdes did not always complete work, had poor social skills, and had some difficulties with writing. He suggested that Mr. and Mrs. Sanchez meet with the school counselor to see if she might have some ideas for working on Lourdes's social skills.

In preparation for the appointment with the Sanchez family, Dr. Stevens, the school counselor, pulled Lourdes's school file. Because he had already had a conversation with Mr. Jackson, Dr. Stevens was surprised when he located Lourdes's most recent test scores. On the Iowa Tests of Basic Skills (ITBS) she scored in the 94th percentile in reading comprehension, out-of-level, having taken the seventh-grade test. Her School Ability Index on the Otis-Lennon School Ability Test (OLSAT) was 142. It was evident that Lourdes was a very bright student. When the Sanchez family arrived, Dr. Stevens chatted with them briefly and asked Lourdes to explain why she was bored in class. She delineated the lack of challenge, few chances to think deeply, and "baby work," as she termed her homework. Dr. Stevens decided to use the Iowa Acceleration Scale, a data-gathering instrument that is designed to indicate a student's likelihood to be a good candidate for acceleration based on the data that are gathered, including both academic and social-emotional information.

Dr. Stevens gathered information from the family and from Lourdes's permanent record. He then visited with Mrs. Fisher, who would be Lourdes's new teacher if acceleration were pursued. They perused the information as well as some

of Lourdes's work samples. Mrs. Fisher had some doubts about Lourdes's ability to write at the level expected for sixth graders, but she was extremely impressed with her reading comprehension and verbal facility. She felt that she could provide some scaffolding to help Lourdes improve her writing and was willing to give her a 6-week trial period in her class. When Dr. Stevens met with both Mr. Jackson, the sending teacher, and Mrs. Fisher, the receiving teacher, he laid out all of the data. Mr. Jackson was not enthusiastic, but he did agree that Lourdes should have the opportunity to try, although he still felt that Lourdes was too immature for a seventh-grade class.

After 2 weeks in the seventh-grade language arts class, Lourdes was showing improvement in her work habits, paying attention, and completing all assigned work. By week 3, she was in the most advanced reading group and excelled at work involving critical analysis. At the end of the trial period, Mrs. Fisher was pleased with Lourdes's work, felt her placement was working well, indicated that her social skills were improving, and commented that the other students had accepted Lourdes as a classmate. Lourdes's handwriting was still messy, but her keyboarding skills were excellent; thus, she used a word processing program to complete most of her work. At the end of the semester, Lourdes had earned an A in her new class.

Because Dr. Stevens was aware of the Iowa Acceleration Scale, *A Nation Deceived* (Colangelo et al., 2004), and *A Nation Empowered* (Assouline et al., 2015), he was able to effect a needed change for Lourdes. Being able to gather the necessary data and determine the feasibility of subject-based acceleration allowed the school counselor to work with the family, the sending teacher, and the receiving teacher in the best interest of the student.

Grade-Based Acceleration

Grade-based acceleration, or grade-skipping, in its simplest form, entails moving from one grade to another but skipping the grade between the two (e.g., completing second grade and entering fourth grade the next year rather than third grade). There are a variety of programming options that may be organized under this general setting, including early entrance to school and early entrance to college. Early entrance to school usually involves students entering first grade when their age-mates are entering kindergarten; however, it can also encompass early entrance to middle school or high school. Early entrance to college may simply mean skipping the senior year and proceeding to college after grade 11. There are some early college programs that allow students to complete high school and the first year or two of college at the same time.

Under the best circumstances, grade-skipping should be chosen as an option as early in the child's school career as possible (Assouline et al., 2015; Colangelo et al., 2004; Coleman & Cross, 2005; Rogers, 2007). Gifted students whose achievement measures indicate they are performing a year or more above their grade-level peers are good candidates for grade-skipping. As mentioned in the section on subject-based acceleration, beliefs that acceleration can somehow damage the social and emotional development of gifted students continue to persist despite research that indicates otherwise (Assouline et al., 2015; Colangelo et al., 2004; Neihart, 2007; Rogers, 2007; Steenbergen-Hu & Moon, 2011; Steenbergen-Hu et al., 2016).

Grade-skipping, including early entrance to school and college, has a positive effect on achievement. The effect size for academic achievement for early entrance into school is 0.49; for grade-skipping the effect size is 1.00 compared to students' same-age peers and 0.56 compared to their older peers; for early admission to college, an effect size of 0.35 was reported (Rogers, 2007). Grade-skipping is a cost-effective and efficient programming option because no additional materials or teachers are needed; the students join an already intact class.

Christopher: Early Elementary Grade-Skipping. Christopher is a well-adjusted, joyful learner who reads voraciously and loves school. He entered first grade at Forest View Elementary School, a midsized suburban K–5 school this year, having been at a Montessori school for Pre-K4 through kindergarten. Christopher's preschool and kindergarten teachers both remarked that he was a class leader and an excellent role model. He is a kind, thoughtful, and friendly little boy who had no difficulty relating to his classmates or the adults in a setting that was academically, culturally, linguistically, and socioeconomically diverse. He is respectful, well-mannered, and has an innate sense of what is fair and just. He has exceptional task commitment and is highly motivated to learn.

At the end of kindergarten, Christopher took the Iowa Test of Basic Skills, Form E, Level 6, which covers K.8–1.9. The results indicated his academic achievement was above what is typical for a child entering first grade. Christopher's scores in reading, language, and mathematics as well as his composite score were in the 99th percentile and ninth stanine. On many of the subtests, he did not miss any questions; thus, he consistently hit the ceiling on the test. In essence, Christopher was coming to first grade already having mastered many components of the typical first-grade curriculum. For example, he could easily add and subtract four-digit numbers with regrouping; he had a conceptual understanding of multiplication and division as repeated addition and subtraction, respectively; he read well above grade level fluently and with comprehension; and he had an extended knowledge of many science and social studies topics. According to his parents, he soaked up

information like a sponge, retained it, and could understand and apply that information appropriately within and across content areas.

In Pre-K4, first with the teacher's assistance and later independently (with the teacher's approval), Christopher created his own work plan for the day, selecting what he would work on for math, language, science, social studies, reading, practical life, and sensorial. He worked independently or in a small group, receiving individualized lessons from his teacher when he was ready to move to the next level of work. In Pre-K4 he was placed in a multiage class with 4-, 5-, and 6-year-olds; some children were labeled as Pre-K and others as Kindergarten according to state guidelines (reaching the age of 5 by August 31). When Christopher started being bored and not paying attention, his teacher had him begin working with a journal prompt daily with a small group of children who were in kindergarten and introduced more advanced concepts in math and more difficult reading material, thus providing more challenging work for him.

When his parents registered him for first grade at Forest View, they were told that they could write a letter describing the qualities they would want his teacher to have, but they could not request a specific teacher. They asked that Christopher be placed with a kind and caring teacher who has the knowledge, skill, and understanding to meet the needs of an advanced learner, preferably someone with certification or advanced coursework in gifted education, and who enjoys the challenge of teaching bright children. Furthermore, they wanted Christopher to continue advancing in his knowledge and understanding rather than coming to a standstill. They preferred a teacher who could truly understand and support the cognitive, social, and affective needs of an advanced learner such as Christopher and who would nurture his love of learning, not dampen his enthusiasm.

During the summer, his parents had him tested by a school psychologist. As measured by the Wechsler Intelligence Scale for Children–Fifth Edition (WISC-V), his Full Scale IQ score was 138 and his General Ability Index was 140. Christopher's parents met with the school principal to talk about gifted services for him but were told that no child could be considered for services without a locally developed checklist of gifted behaviors completed by a teacher at Forest View. Teachers would not start completing the checklists until after the first 6 weeks of school. It should also be noted that Christopher's birthday occurs 6 days after the state cut-off for entering school, and the state requires all students to attend kindergarten, so there was no option for Christopher to enter school early the previous year. Thus, Christopher started first grade 3 weeks before he turned 7.

During the first few weeks of school, Christopher excelled, bringing home all 100s on work and, as noted by the parents, putting forth little effort. He began to get stomachaches and ask not to have to go to school. He complained that the work he was asked to do was boring and he had covered the same mate-

rial in Pre-K4 and kindergarten, and he begged to go back to his old school or be homeschooled. He stated that he loved his teacher and his friends, but he really wanted to learn something new. At this point, his parents contacted Dr. Kendrick, the school counselor to ask her advice about the social and emotional issues Christopher was having and what options might be available. Dr. Kendrick had an endorsement in gifted education and was well-acquainted with the state regulations in gifted education. Several years ago, the state instituted an acceleration plan that required all schools to offer acceleration options, including whole-grade acceleration, if student data indicated a need. Acceleration could be requested at any point in time. She explained the options available to the family, and after talking with Christopher, his parents indicated they would like to pursue grade-based acceleration.

Dr. Kendrick gathered Christopher's achievement and IQ scores that were submitted when he entered the school, his current midquarter grades in all subjects, and an email from his teacher, Mr. Michaelson, to his parents, indicating that he felt Christopher already knew most of what would be taught in first grade. Dr. Kendrick had Christopher take two pretests for second grade, which are also used as posttests at the end of the year. Math and reading were sampled. Christopher's score on the second-grade precourse test from the school's math series was 85%. On the baseline group test from the reading series, he scored 90% on high frequency words, 90% on vocabulary, and 89% on comprehension. On the statewide computerized progress monitoring system in reading, he scored a Lexile measure of 730L (approximately fourth grade), an overall reading percentile rank of 99, and a Level 5 (1 lowest, 5 highest).

Based on these scores, Dr. Kendrick scheduled a conference with the parents, current teacher, receiving teacher, and principal. After discussing the scores, Christopher's current grades (all Es for Excellent), and any social-emotional factors, all parties agreed that his best placement was in second grade. Dr. Kendrick continued to follow Christopher as he transitioned to second grade, observing him in class and talking with his new teacher. Whenever Dr. Kendrick asked him how he was doing, Christopher always smiled and said he was happy and "really liked having some challenging work."

Christopher socialized well in the class, continued to receive straight Es in all subjects, and was promoted to third grade at the end of the school year.

Summary

As has been noted in this chapter, not all options are viable for all gifted students; there is no one programming option that will be a perfect placement for all

gifted students. A clear understanding about the characteristics of gifted students, knowledge of the advantages and disadvantages of each option, and open communications among parents, teachers, and the student in need of services can help the school counselor assist in making appropriate decisions about services offered to meet the needs of individual gifted students.

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CHAPTER 8

Counseling the Rural Gifted

CRAIG HOWLEY AND AIMEE HOWLEY

> The task is to discover what their experience is, not to tell children what their experience could or should be. (Coleman et al., 2015, p. 359)

This chapter takes an ecological perspective, seeing rural children as part of families and communities first of all. This ecology notably rests on rural commitments and preoccupations, which diverge from the mainstream and are ignored and sometimes dishonored in schools (Carr & Kefalas, 2009; Theobald & Wood, 2010). Rural communities are not even represented as a cultural variant in textbooks about multicultural education (Ayalon, 2003). Schooling instead valorizes a suburban-upper-middle-class experience of life and its story of success: status and wealth in the city (Berry, 1970/2010). In rural schools, able students learn that their responsibility is to leave; those unable and unwilling to leave remain stuck, often seen by educators as "losers" (Corbett, 2007; Hektner, 1995; Rebanks, 2015). The cost of such an imposition is perhaps felt most acutely by those students most attentive to ideas about how the world works and how it should work (including many able learners in rural schools; e.g., C. B. Howley, 2009; Rebanks, 2015). Beyond the personal and cultural insult, however, the imposition is also an American cultural disaster.

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Counseling services in rural schools could and should mitigate the disaster. In explaining the importance of this work, this chapter considers what rural is, the nature of rural identity, the advantages of rural life and rural schools, and how rural counseling can find opportunities within the dilemmas confronting gifted students and their families.

What Is Rural, and Why Pay Attention?

Both the Bureau of the Census and the U.S. Department of Education have very clear definitions of rural places and rural schools. These definitions carve off rural areas (counties, school attendance zones) from metropolitan ones. Rural places are, in general, more sparsely populated, and many are distant from cities.

Necessarily missing from these useful definitions are conceptions of what it means to inhabit rural places. Missing are the once-familiar human orbits involving commitments to family, community, and place (land and how people interact with it). Thompson (2002) argued that caring for hearth and home is an activity that enriches the lives of both men and women. In her feminist view, the marginalization of the domestic realm in the modern world has seriously diminished the quality of life throughout America. The homeplace is important. Domesticity is not contrary to progress, equality, or well-being. Suburban-upper-middle-class prerogatives and aspirations, which construe success in terms of status and income, cannot be the one best way to a good life. In the view of some critics (e.g., Deresiewicz, 2014; Kunstler, 1993; Rose, 2014), in fact, these prerogatives might even undermine prospects for living life well.

Unexpectedly, the COVID-19 pandemic forced together many families, setting up a natural experiment focusing in part on life in the domestic realm. This social experiment, which led to increased family togetherness and increased domesticity for some and increased domestic tension for others, illustrated the need for alternatives within the national cultural toolkit. Whatever the specifics, it did point in general to the fact that humans need alternative conceptualizations of how to live: There is no one best way. Rural ways of living, knowing, and loving (e.g., being devoted to an extended family living nearby) give to all humans one such alternative conceptualization (Berry, 1977/2015; Gruenwald, 2003; Rebanks, 2015).

Of course, rural teachers and counselors and rural families and communities are not struck by this new "conceptualization." For rural people, the practices and commitments that figure as alternatives elsewhere are our everyday reality and not parts of some theoretical alternative. Even so, we shouldn't take them for granted. Notably, the experience of most counselors in rural schools connects to rural life.

That experience is important because it can be an easily accessed source of doubt about the all-too-common messages about rural deficiency and the systemic bias toward the suburban-upper-middle-class view of success. Today, that view pervades the national culture and nearly all of schooling.

Contemporary schooling is less and less about learning to live well and contribute to the common good, and more and more about achieving status and wealth (Chaplin et al., 2014; Paul & Seward, 2016; Pope, 2001). If such a vision were productive of better outcomes for most people, or better outcomes for everyone (the common good), perhaps it would have greater intrinsic value. But just the opposite is the case. Under its reign, the middle class has been hollowed out, and income and wealth are more unequal than ever in the United States (e.g., Carr & Kefalas, 2009; Piketty, 2014). As a result, many Americans feel inadequate: innately striving for a meaningful life but not receiving much support to address that aspiration (e.g., Berry, 1977/2015; Chaplin et al., 2014; Deresiewicz, 2014). Public schooling ought to figure among the places where that support would be found, but it too rarely is.

The Nature of Rural Identity: Thinking Oneself Rural

By "thinking oneself rural" we mean actively realizing one is rural. It is a process that might begin with an epiphany. Such thinking positions someone (e.g., a talented student in a rural community) to question the deficiency narrative about rural places and people that schools too often propagate (Paul & Seward, 2016). Thinking along these lines connects skepticism toward suburban-upper-middle-class perspectives with deepening commitments to locale, family, and associated rural pursuits. Schooling might assist with such deepening, but typically it does not.

Anyone can do this thinking, and reading certainly helps. The story of English shepherd James Rebanks (2015) shows how this process of thinking oneself rural works, and also how such thinking is routinely deflected and marginalized in rural schools.

A Shepherd's Life

James Rebanks is a sheep farmer tending (as of 2020) a flock of about 500 Herdwick sheep in the rough English hill country. His account of high school

echoes our own rough hill-country experience of rural schools in the Appalachian part of the United States (Rebanks, 2015):

> I realized we were different, really different, on a rainy morning in 1987. I was in an assembly at the 1960s shoddy built concrete comprehensive school in our local town . . . listening to an old battle-weary teacher lecturing us how we should aim to be more than just farmworkers, joiners, brickies, electricians, and hairdressers. . . . I argued with our dumbfounded headmaster that school was really a prison and "an infringement of my human rights." He looked at me strangely, and said, "But what would you do at home?" Like this was an impossible question to answer. "I'd work on the farm," I answered, equally amazed that he couldn't see how simple this was. He shrugged his shoulders hopelessly, told me to stop being ridiculous and go away. . . . Plenty of us were bright enough, but we had no intention of displaying it in school. It would have been dangerous. (pp. 3–5)

Teachers were selling an enemy ideology: the supposed need to leave everything one loves in order "to be somebody." Rebanks continued:

> My [paternal] grandfather was born in 1918 into a fairly anonymous and unexceptional farming family. . . . He was, and we his descendants remain, essentially nobodies as far as anyone else is concerned. But that's the point. Landscapes like ours were created by and survive through the efforts of nobodies. . . . This is a landscape of modest hardworking people. The real history of our landscape should be the history of the nobodies. (pp. 18–19)

The teachers weren't interested, and so Rebanks described his high school self as belonging to a group of mischievous "lads" devoted to doing as much damage in school as possible. The enemy—schooling and teachers—had earned it, after all. To be sure, the enemy ideology is not about the practices of reading, writing, problem solving, logic, and critique. These are practices for everyone, as Rebanks discovered with no help from his high school. Rebanks effectively left school at age 12 and withdrew altogether as soon as legally possible.

At this juncture in the story (Rebanks, 2015), his readers were left wondering how a youngster who hated school so much might have learned to write so well. It was all predictably accidental. It was actually three accidents. First, he discovered his maternal grandfather's books and read them; they were good books, and they

helped him make sense of the entire world, including his own part of it. Second, he'd been observing his sisters do well in school; the enemy ideology was okay for them. Third, after arguing seriously with his father, he concluded he'd have to do something else than farm sheep for a while. At age 21, he enrolled at the local adult education center to prepare for his A-level exams (equivalent to the GED route in the United States): "It was fairly easy if you'd read the books I had" (p. 143).

The rest of the story took Rebanks to university (Oxford), into a relationship with a woman who wanted to farm with him, back to the farm, and to the part-time, off-farm employment needed by most contemporary farm families. The meaning of his and his family's and community's lives comes from their rural place and their work in it. Reading and thinking have enriched his commitments to place, family, and community—and to similar realities worldwide.

Rebanks's (2015) experiences demonstrate that reading, writing, logic, and critique are practices that naturally apply to enacting and elaborating engagement with life in local places: to thinking oneself rural. They help one live a better and wiser life both publicly and privately.

Observe, though, that an appreciation for nobodies (i.e., ordinary working people) does not mean that reading, writing, logic, and critique are necessary for living a good life. Still, it's unsettling that so few people do what so many people otherwise might (i.e., read, write, reason, and critique). Rural schooling ought, in theory, to help cultivate these practices widely in rural communities. To do so, schooling would need to take the side of rural communities. Instead, rural schools typically take the side of national manpower needs and end up sponsoring the rural "brain drain" (Carr & Kefalas, 2009; Corbett, 2007; Paul & Seward, 2016).

Possibly, many rural educators in the United States are themselves challenged to grasp what it takes to help students think themselves rural. They may not see value in rural ways of living nor understand the processes of reading, writing, reasoning, and formulating critique required to think oneself rural. Part of the challenge is the widespread failure to understand that working with hands and body requires a lot of thinking (especially reasoning). Builders, farmers, and mechanics of all sorts know that it does (Crawford, 2009; Rose, 2014).

Rural counselors and teachers can, however, learn to appreciate (and help others appreciate) the intellectual side of manual labor and, in doing so, learn to take the side of the nobodies. They can also learn to connect reading, writing, and critique (as well as reasoning) to the consideration of rural life. Bomer (2017) called this approach "culturally sustaining pedagogy":

> Culturally sustaining pedagogy requires . . . that we take an appreciative stance—finding and foregrounding the resources [students] already have, such as their language and what they can do with it, their knowledge of stories and characters, their expanding expertise about varied things in the world, and the wealth of relationships that both sustain and challenge them. (p. 13)

For rural counselors and teachers, efforts to think oneself rural provide a good starting point for working with able students in rural schools. To explore this outlook, educators need first to affirm their own rural upbringing and experience. They need to acknowledge what it means to be a nobody oneself and, like Rebanks (2015), to recognize the virtue of that standpoint. This is a difficult proposition for anyone, but especially for educators in the United States, where being a somebody seems so important. It means, for the vast majority, unlearning what they've been misled to think is virtuous. Nevertheless, as Li (2006) claimed in his discussion of the aims of environmental education,

> The cultivation of humility as a civic virtue could play a key role in sustaining collaborative efforts to develop inclusive and integrative environmental education. Humility as a civic virtue could enable us to recognize cultural "others" as equal partners in a constitutive community where all citizens can be co-inquirers into our terrestrial responsibilities. (p. 2468)

The Advantages of Rural Life and Rural Schools

Viewing rural students, families, and schools from an appreciative stance enables counselors and teachers to build on the funds of knowledge and cultural resilience inherent in rural ways of life. It also encourages educators to challenge conventional deficit thinking—a perspective that treats rural places, institutions, and people as ignorant, backward, immoral, and dangerous (Azano & Biddle, 2019; Geller et al., 2015). The move to see rural experience as an asset promotes skepticism about overly simplistic attributions of deficiency (e.g., the tendency to blame rural people for opioid use in some of their communities). When attribution is properly made, it is to the companies that have exploited rural communities rather than to the communities themselves (Spangler, 2016). When school counselors and other educators understand the exploitation in play, they can join

forces with activists in the community to seek redress and to support families and their children.

The Assets of Rural Schools

To promote a strength-based perspective, school counselors, teachers, and school leaders can educate themselves about the educational practices that support rural students' learning and community sustenance. These qualities often put rural schools in a good position for augmenting the intellectual development of academically talented students. Three qualities are particularly germane: small school size, close linkages with communities, and structural stability.

First, many rural schools are small compared to urban and suburban schools (e.g., Bard et al., 2006; Cross & Burney, 2005). Small school size is a proven achievement advantage for student in impoverished communities (Bickel & Howley, 2000; Friedkin & Necochea, 1988; Kuziemko, 2006). Small schools make acceleration—one of the most well-established educational provisions in education research—easier and more attractive to implement than other provisions for very able students (e.g., Colangelo et al., 2004; Hany & Grosch, 2007; Swan et al., 2015). In these schools, the popular pull-out programs are difficult to manage, lacking the large enrollment numbers and deep pockets characteristic of many suburban schools. Counseling in rural elementary and high schools should exploit the opening for well-validated practices, especially acceleration.

Second, rural schools are embedded in identifiable communities. Even after a century of rural district consolidations, the schools that remain unite their patrons in an all-in-it-together kind of community (Corbett, 2007; DeYoung, 1995; Lyson, 2002; Sipple et al., 2019). All else equal, this solidarity creates excellent opportunities for place-based education and project-based learning (see, e.g., Egan, 2010; Gruenewald & Smith, 2008; Lewicki, 2010; Sobel, 2004: Theobald, 1997). The pedagogical (and intellectual) leverage to be had from curriculum that intersects with the ideas, histories, sciences, and mathematics of local territory should seem clear to educators. But it wasn't so clear to those teaching Rebanks (2015):

> History lessons at school didn't really go like I hoped they would. We never did any kind of history of us or our landscape. I think the teachers might have been surprised at the idea that people like us had a history of any interest. . . . We . . . briefly studied World War II and the Cold War, but in such a tedious way I quickly lost interest. I remember being given a sheet of paper that was a cartoon showing the difference between capitalism,

> fascism, and communism. It was hard to tell what was wrong with communism or why they might be pointing atomic bombs at our house, or why we had a hand-turned air-raid siren in our back kitchen. When I remember the 1980s, I think of how shit that school was. (p. 93)

Too many schools everywhere leave this sort of bad taste in the mouths of students, and perhaps especially those prone to insights, connections, and questions.

Finally, rural schools tend not to be swept into the frenzy of fads that masquerade as innovation and improvement elsewhere (e.g., Fullan & Quinn, 2016; A. Howley, 2003; Theobald & Rochon, 2006). Positives for rural educators to support rather than the distracting fads include:

- **Academic press:** Academic press is the expectation of achievement, likely measured with test scores. It scaffolds students' performance and limits distractions (A. Howley & Howley, 2006). Accountability and pedagogical structure, moreover, provide much clearer opportunities to practice acceleration.
- **Stable leadership:** School leaders with a long-term commitment to their schools are well positioned to support teachers' efforts to use productive instructional approaches, such as place-based pedagogy (e.g., A. Howley et al., 2009).
- **Professional collegiality:** Teams of educators who know one another well and work collaboratively make better instructional decisions (Fullan & Quinn, 2016; Hoy et al., 2002), including those about acceleration and other sorts of sensible differentiation, both for gifted students and others with special needs (A. Howley, 2002; Santamaria & Thousand, 2004; Sayeski, 2009).

Collaboration among educators is a challenge everywhere, of course. But many employees of rural schools are local people with local attachments; they know one another well and have strong incentives to maintain positive relationships with one another.

With training in ways to promote social-emotional development and psychological well-being, moreover, counselors can provide strong support to instructional teams (e.g., Aldana & Martinez, 2018). For instance, they can serve as process coaches—helping teams draw on everyone's strengths and function productively. They can also serve as liaisons between instructional teams and professionals from other agencies (e.g., social service, health, and mental health agencies). Furthermore, school counselors can help teams focus on family and

community ecology when they consider the ramifications of various educational alternatives for rural students with particular talents and needs.

Counseling Research From an Asset-Based Perspective

The research literature in counseling contains an example of what it looks like for an educator to understand and appreciate rural ways of being. Rural high school counselor Beverly Burnell was puzzled by able rural students who chose not to go to college upon graduation from high school. She pursued the question for her dissertation. Having made their decisions with care, the rural students she studied gave good reasons for their choices. One of these students chose a 2-year vocational program:

> Once I started working with steel, I don't know. It's just . . . I mean sure it's hard labor . . . but it's a different kind of labor . . . I mean. There's more to it . . . Here you can weld, you can torch, you can plastic cut, you can use band saws. You use punches, you use brakes, you use shears . . . fork trucks, *anything you can think of* to do with steel I've run. So, I mean, it's fun. . . . I just enjoy it. I think . . . I don't know how to explain it. Steel work is . . . you stand back after it's done and you look at it and it's like "Wow!" (Burnell, 2003, p. 107, emphasis added)

A great deal is going on in this student's mind with respect to designing and making useful objects. Such engagement and imagination can power a life. Choosing the vocational option rather than the college option was a rational and culturally resonant choice.

When educators see such choices as irrational (even self-destructive), as they often do, the problem is not with students or their families. The problem is with the routine dismissal out-of-hand of rural students' and families' commitments and concerns. The dominant narrative is responsible for this dismissal, not individual educators. Professional educators are trained up to the dominant narrative. Their own experiences may appear to confirm it.

Questioning the dominant narrative has been difficult for decades, moreover, but it became even more difficult in the years in which punitive accountability regimes routinely pressured all schools to focus on a standard, narrowly defined set of schooling outcomes (Welton & Williams, 2015). Even in face of these external pressures, counselors—like Burnell (2003)—are probably those best positioned in rural schools to hear and respond to the voices of families and students. Like administrators, counselors see the school as a whole, and their training makes

them receptive to holistic, systemic, and ecological perspectives (e.g., Chan et al., 2019; Rogers et al., 2018).

The Opportunities and Dilemmas of Rural Counseling: Applications to Gifted Students and Their Families

This section considers two major advocacy roles for counselors in rural schools. These involve advocacy on behalf of students and their families and advocacy in countering the dominant narrative of college for all.

Student and Family-Centered Advocacy

Many discussions about what school counseling can provide focus on the advocacy provided by school counselors, which benefits both students and their families (e.g., Bessman et al., 2013; Feldwisch & Whiston, 2016; Field & Baker, 2004). Advocacy, in fact, is one of the important competencies specified in recent school counseling standards (American School Counselor Association, 2012). Discussions of advocacy typically consider efforts on behalf of individual students (e.g., individuals from marginalized groups, individuals whose parents did not attend college, individual students with special needs). Ecological, feminist, and social justice frameworks, however, speak to the value of broader engagement with student groups, families, communities, and the wider political surround.

Applying this broader advocacy lens to school counseling in rural schools requires counselors to affirm and draw on the assets present in rural families and communities, as well as to acknowledge the centrality of families' rural commitments. These two grounding principles frame the various types of advocacy that counselors offer through individual planning, responsive services, and efforts to address systemic issues (Whiston & Quinby, 2009).

First, individual planning involves authentic conversations about rural assets and rural commitments. The point is to listen actively and hear what is said. Otherwise, counseling simply defaults to the old "gatekeeper" role (McKillip et al., 2012). These authentic conversations also yield data for improvements to the counseling system and to school and district culture as a whole.

Second, authentic conversations yield information to guide educators in planning, delivering, and sustaining responsive services for individuals and groups. In rural communities, efforts to include parents and community members in developing and perhaps even delivering these services help make those services

responsive. The systemic reformer Andy Hargreaves is among those advising this approach in rural schools and districts: "To truly assist rural communities, educators must therefore . . . reach beyond the classroom to the wider community and the ways that students can identify with and connect to that community" (Hargreaves et al., 2015, p. 315). Involving parents and community members enables schools to sponsor discussions of local opportunities, such as work-study and mentorship programs (e.g., Aschenbrener & Johnson, 2017), as well as challenges, such as the rural opioid crisis (Young et al., 2012). To develop responsive programs in rural schools, Worzbyt and Zook (1992) advised educators to search for opportunities, inspire shared vision, enable others to act, model productive action, and offer affirmation and encouragement; also see Taylor (2002) for a practical way to get started.

Finally, this type of work with rural students, families, and communities can lead to advocacy on a broader scale. Ackerman (2017), for instance, identified four issues relating to child welfare that might compel counselors to take on advocacy work in the political arena. Three of the four systemic issues that Ackerman discussed have direct applicability to counseling of gifted students in rural schools: racial disproportionality, organizational constraints, and inadequate access to community-based services.

Pushing Against the Dominant Narrative: The "Going to College" Problem

The fixation with "success" is a problem for high school counseling, relating in particular to the guidance function of planning for college. In the typical narrative, school counselors, among other educators, encourage—and empower—all students to go to college, and all students subsequently do go to college (McKillip et al., 2012). For many reasons identified by McKillip and colleagues (2012), it works this way only some of the time, however. Issues relating to social structure and schooling, but also to families and students themselves, interfere with the predicted (and preferred) path. According to this narrative, some students and families interfere with the path leading to their own well-being.

As noted previously, Burnell (2003) nonetheless did not see the dominant narrative as particularly apt. She was concerned especially with the view that students themselves were most often acting in irrational ways to undermine their own best interests. Furthermore, she suspected that the narrative was even less apt in rural places than elsewhere (a view in accord with the views of many rural scholars cited in this chapter). Burnell's study investigated the possibility that college-able rural students who chose alternatives to college-going immediately after high school

might be making up their own minds responsibly. She concluded that at least those students she interviewed had good reasons for their choices.

Surely many gifted students and other able students will want to go directly from high school to college. But in rural places, they, like Burnell's (2003) interviewees, often find good reasons to pursue a path that deviates from the suburban-upper-middle-class norm. For instance, they may not want to entertain the debt that comes even with a full ride to college, they may prefer schools closer to home, and they may want adult lives in their home or in neighboring communities.

Of course, very able rural young people are "naturally" good candidates for engaging higher education. They want to understand their world better, and the first circle of that world is rural: a world as complex, contradictory, and compromised as the world existing in any locality. Their curiosity about that world, and about all to which it connects, is the point of continued schooling. It's a point just as important as the practicalities of family and employment, in part because wider reading and knowledge and thinking enhance the act of living a rural life.

But educators should be cautious about confusing academic talent with the need for advanced schooling. University instruction is not necessary as a goad to wide reading, imaginative writing, or systematic inquiry (C. Howley et al., 2017). Furthermore, many activities—not just academics—stimulate and expand intellect (Rebanks, 2015; Rose, 2014). Adult life itself offers many different opportunities for self-directed learning, even requiring self-directed learning in order to enable flexible adaptation to changing circumstances (e.g., Morris, 2019).

Suburban-upper-middle-class values, aspirations, and life paths hardly represent the one best way. In all places, not just rural places, there is an increasingly visible contest between the suburban-upper-middle-class norm and reasonable, viable, and preferable alternatives. Far, far too many young people across the United States go to college reluctantly, not only poorly prepared but also without any motive but fantasies of status, income, and wealth. Worse still, education debt is sold to students as their best chance for a good life (C. B. Howley & Howley, 2015; Nguyen, 2012; Reed & Cochrane, 2013). Many academically able working-class students decide on their own that education debt is too often a bad bargain (e.g., Gonzalez et al., 2019; Nguyen, 2012). They are usually right to think so (M. Bailey & Dynarsky, 2011).

As the rational choices of many capable working-class students attest, not going to college ought to be viewed by educators across America as a productive alternative. Signing recruits to college for the sake of status, income, and wealth is neither educative nor productive (Deresiewicz, 2014). Alternative pathways exist in full view of everyone, and they are often used by able rural students (Burnell, 2003) despite the aspirations held for them by many educators.

One alternative postsecondary pathway is vocational training—a 1–2-year program. Another is part-time work and part-time matriculation for a degree in a nearby institution. Community colleges are a robust resource for both pathways across the United States, and they are the pathways that Burnell (2003) and W. Bailey (2018) found appealing to the able students they interviewed. The varied alternatives represent a measured and longer term educational approach to formal schooling that honors the prevalent attachment of rural students and families to one another and to their communities.

Longer term thinking, moreover, means the familiar pathways are not separate pathways, either. America has a robust and accessible higher education system. The intellectual curiosity of able students can begin in a vocation and lead through it to conventional higher education over the years. We've seen it happen often: a superintendent who began as a paraprofessional and teachers who got GEDs and then completed college degrees once their children were older. Both of us pursued our terminal degrees while employed full-time. Rural counseling can learn about, appreciate, support, and propagate such trajectories among talented rural students. These efforts will serve rural students, families, and communities far better in the long run. Berry (1977/2015) put the issue in context a long time ago:

> It is characteristic of our present society that one does not think to improve oneself by becoming better at what one is doing or by assuming some measure of public responsibility in order to improve local conditions; one thinks to improve oneself by becoming different, by "moving up" to a "place of higher consideration." (p. 184)

The alternative pathways lead into the community rather than out of it, augment local care and equity, expand educators' understanding of aspiration, and build educational opportunities worth pursuing across American society. Rural counseling programs have every reason to contribute to this project and some distinct advantages for engaging it when they so choose.

Many educators (see Mortenson, 2000, for one example) understand formal education as a way to become somebody (Berry, 1970/2010; Rebanks, 2015). Why would anyone remain a nobody if they could help it? To close this chapter, we attempt an answer. The answer requires assent to three propositions listed in order of increasing difficulty.

1. Oppressive poverty so narrows life chances that one should learn ways to not experience it and, if born into it to, to escape it.

2. The cause of poverty is not poor people, even though this falsehood is part of the American creed (Bénabou & Tirole, 2006).
3. Life is an interesting and variable journey; failure is part of the journey and, no matter how high the status or great the wealth, success is an illusion.

Accepting these propositions, one begins to understand the value of being a nobody. The propositions underwrite a reverence for what's really important in life (truth, justice, goodness, love), and they embed an appreciation of individual limitations. Humans are capable of great things collectively. This fact remains whether one is a banker or an artist, a farmer or an artisan, and whether one is a nobody or a somebody. Becoming somebody might well be a moral failing.

Final Thoughts

This chapter calls on school counselors who work with gifted students in rural schools to focus their practice on affirmation, advocacy, and a broad view of the good life. These guides to practice implicate many specific types of action and require certain types of restraint. Action entails work to help rural students make sense of their experiences and the opportunities available to them. It also includes efforts to understand and affirm rural commitments, values, preoccupations, and ways of being. From an advocacy perspective, the action of rural school counselors can support a level of local care that is needed everywhere (see, e.g., Jacobson, 2016). Being part of the rural school means being part of the rural community. Counselors can advocate for equitable treatment of their school and community and for policies and practices that expand social justice throughout their schools and communities.

Restraint involves the disposition to push back against (or at least remain agnostic toward) the conventional view that "up and out" is what talented people from rural places ought to do. Recognizing that a good life might result from close connection to family, community, and land, counselors and other educators can affirm the choice made by some (or even many) talented rural students to delay college, sequence or stretch out participation, or forgo it altogether. Counselors can help talented rural youth understand the multiple pathways into higher (or other postsecondary) education. They can support these students (and their families) in their skepticism of a one best pathway (e.g., elite, selective schools on the east and west coasts right after high school).

Counselors and other educators should be discussing ways for students to stay and to live a fulfilling life locally. Assisting such students in figuring out how to sustain intellectual interests into their adult years through self-directed learning

and other informal modes of education would serve them extremely well irrespective of their choices about where to live and how to earn a living. This work may mean that counselors need to educate their colleagues (e.g., teachers and administrators) about the assets of rural life. It may also mean that they need visibly and vocally to stand in solidarity with rural families. Framing their work as action on behalf of equity and social justice is a good way for counselors to gird themselves for the challenges that this type of advocacy requires.

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CHAPTER 9

Gifted Children in Urban Settings

FRANK C. WORRELL, ERIN S. GELGOOT, AND ADENA E. YOUNG

The focus of this chapter is on gifted children in urban settings. This focus signals that the chapter is concerned primarily with youth from low-income and ethnic minority backgrounds—groups that are traditionally underrepresented in programs for the gifted and talented (Worrell & Dixson, 2018)—attending primarily low-income schools. To date, the majority of the scholarship on urban youth focuses on academic difficulties and dropping out rather than gifted performance (e.g., Swanson, 2008), which makes this chapter important and timely.

In the United States, schools located in cities have students who report being 47.6% White, 26.7% Hispanic, 15.2% Black, 5.2% Asian, 1.0% American Indian/Alaska Native, 0.4% Pacific Islander, and 3.9% two or more races (U.S. Department of Education, 2019b). High-poverty schools are those with more than 75% eligible students for free or reduced-price lunch. In U.S. cities, 40.1% of schools are considered high poverty and are comprised of students who are 56.1% Hispanic, 54.3% Black, 39.9% American Indian/Alaska Native, 34.4% Pacific Islander, 14.0% White, and 26.8% two or more races (U.S. Department of Education, 2019a). Counselors should familiarize themselves with the demographics and cultural backgrounds of their students and families, as the makeup of student bodies may vary by district and even by school.

Counseling has been defined as an interaction between a patient and a counseling professional to help the former deal with psychosocial difficulties.

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Counseling is also conceived of as advice or guidance to a client—rather than a patient—about issues that will facilitate the client's growth and development. The latter definition is the one used to frame this chapter. In this chapter, we apply an ecological approach to counseling gifted students. We describe how counselors of gifted students can work with schools, teachers, families, and students to assess and promote students' strengths (Lopez & Edwards, 2008; Worrell, 2010).

In this chapter, we begin with a definition of giftedness. Then we discuss academic and psychosocial issues related to achievement in urban populations, and follow this with a brief comment on working with families. Then, we turn our attention to the role of the counselor in the broader school context. In addressing these topics, we draw primarily from the conceptual and empirical literature that has implications for working with gifted youth from urban backgrounds and from our experience in working with these populations for more than 2 decades. It is important to note that the ideas we present are useful for working with all children but may be especially useful when working with gifted youth in urban settings. Moreover, given the brevity of the chapter, the goal is to be cogent with key references rather than comprehensive.

Defining Giftedness

The definition of giftedness that we present here is a simple one. Giftedness is defined as superior academic performance or the potential for superior academic performance relative to students in the appropriate peer group (Subotnik et al., 2011). This definition serves several functions. First, it delimits giftedness to academic concerns. This delimiting is not intended to suggest that giftedness in the performing arts, athletics, or leadership is not important, but is intended to indicate that academic talent is what teachers are best at developing and what gifted evaluations typically assess.

Second, the definition clarifies that giftedness is relative to a peer group. Traditionally, giftedness is determined by performance at the upper end of distributions of nationally normed tests (e.g., IQ scores of 130 or greater or achievement test scores at or above the 95th percentile). However, for schools that are at the lower end of the achievement gap, using only national norms will result in low identification rates and may exclude individuals with potential but little educational capital. Thus, we recommend that local norms should be used to ensure identification of the students who are making optimal use of the potentially limited resources in urban schools—those who are, in essence, at the upper end of the distribution in their local school or district. Readers who are interested in local norms and other strategies that are useful in identifying academically talented

students from ethnic, racial, and socioeconomic minorities should consult Peters and Engerrand (2016).

Supporting Academic Achievement

There are several topics specifically related to the academic achievement of gifted youth that are important to discuss here. In this chapter, we highlight three, including the importance of being appropriately challenged, domain-specific aptitudes and interests of students, and the use of metacognition and higher order thinking skills. We discuss each of these in turn.

Importance of Challenge

One of the most important aspects of gifted identification is often misunderstood—that is, when someone is identified as gifted, educators are in essence saying that this individual has been selected to work faster or to go deeper into school topics than their nongifted peers. Gifted programs can be based on enrichment or acceleration strategies. Regardless of the program format, students identified as gifted will be asked to make greater investments of time, effort, and intellect than before being identified. By definition, the identified students have demonstrated greater potential than their peers, and they must work hard to benefit from the opportunities provided.

Counselors are in an excellent position to support students and families in determining what an appropriate course load looks like, aligning course selection with subsequent requirements, facilitating student interest, and creating a balanced yet challenging workload. As will be discussed later in the chapter, students who are immersed in demanding academic environments will need support in self-care, stress management, self-advocacy, and time management among other psychosocial domains.

Wai and colleagues (2010) reported that the number of advanced classes in mathematics and science that students took in the middle and high school years was positively related to the students' academic accomplishments in STEM in graduate school. In other words, educational dose matters and relates to later achievement. Students can be limited by the course offerings of their schools. To supplement academic offerings, school counselors can work with students and families to identify alternate academic options. These options might include enrollment in community college courses, online courses, afterschool programs, or summer programs for gifted youth. Further, counselors are encouraged to con-

sult with teachers about the importance of providing appropriately challenging material for academic development.

Beyond providing an appropriate dosage of advanced courses, there are other academic factors to consider. To select courses, students will benefit from working with counselors to identify their areas of strengths and their interests in particular domains. Further, development of metacognition will support students' academic achievement.

Domain-Specific Interests

An important role that a counselor can play is to help students identify their academic and vocational interests (Sampson & Chason, 2008). Individual interests play an important role in students' decisions to engage with and persist in difficult tasks. Counselors can work as a bridge between students and teachers to identify and provide appropriate curricula that match those interests and aptitudes. Counselors can support students as they identify their interests, for example, by simply interviewing students about their goals and learning about their extracurricular interests, most meaningful school assignments, genres of books they read, or shows they watch, or by using projective tasks like sentence completions to explore students' future goals and values.

Domain-specific aptitudes are also important. The most common aptitudes assessed in gifted identification programs are verbal and quantitative skills. Researchers have found that differences in mathematical, verbal, and spatial aptitudes predict a variety of outcomes, including how much one enjoyed taking certain high school classes, one's college major, and one's eventual job classification (e.g., Park et al., 2007, 2008; Wai et al., 2005). Individuals are more likely to devote the time and commitment necessary for outstanding performance in domains in which they have stronger aptitudes and interests. However, these skills are often not used to decide on academic programming. Thus, it is important that students are provided with opportunities to explore diverse topics and interests in the pursuit of their passions. Ultimately, students' interests and aptitudes should be used to inform their educational and academic careers.

Metacognition

One way counselors can support gifted students' success in high-intensity academic settings is by promoting their development of metacognition. Metacognition allows students to take control of their learning, contributing to overall school success (National Research Council, 2000) and higher levels of achieve-

ment in individual academic domains, such as mathematics (De Corte et al., 1996). Although some researchers (e.g., Cheng, 1993) suggested that metacognition is a key component of giftedness, recent research indicates that many high-achieving students do not use well-developed metacognitive skills on actual problem-solving tasks (Young & Worrell, 2018). These findings indicate the need to focus on metacognitive development among gifted and talented students, especially in urban settings where overall levels of educational achievement may not be high.

Metacognition is an essential aspect of higher level thinking that includes students' abilities to regulate their thinking and the knowledge that they use to regulate that thinking and engage in learning and performance activities (Brown, 1977; Flavell, 1979). An important aspect of metacognition is the regulation of cognition, that is (a) the ways that students prepare for a problem, (b) the ways that they monitor their thinking as they solve the problem, and (c) the ways that they evaluate their thinking and final product. Counselors can assess students' metacognitive regulation skills by asking them to say their thinking aloud as they solve a problem. Counselors can support and scaffold students' thinking by asking metacognitive questions that students are not asking themselves. Examples of metacognitive questions to ask students as they work through a problem include: What is this problem about? What is this problem asking you to do? What do you need to know to solve this problem?

Counselors can also work with teachers to promote metacognition in their classrooms through formal teacher training (e.g., presentations or workshops) and individual consultation. This work includes informing teachers about what metacognition is, what it looks like in their actual classrooms, and how teachers can incorporate or modify teaching practices and learning activities to support metacognitive development within their existing classroom structure. Teachers may benefit from concrete examples of metacognitive thinking in their domains. Teachers may also benefit from opportunities to reflect on examples of metacognition they see in their own classrooms, the activities or teaching methods that they already use that promote students' metacognitive thinking, and new activities or practices that they may wish to try to further promote metacognition.

One way to support teachers as they incorporate metacognition into their classrooms is to use think alouds (Manning et al., 1996; Sandí-Ureña, 2008; Scott, 2008). Think alouds can be used as students think through problems or after problems are completed. For example, an English teacher may ask students to explain to the class how they constructed their essay arguments. Similarly, a math teacher can model their thinking as they solve a math problem step by step on the board. Teachers can create assignments in which students explain why they made certain choices in a project, and students can ask each other questions

about why they took the steps they took. Simple handouts that prompt students to ask themselves questions (What do I know, what do I want to know, and what did I learn? [i.e., KWL charts]) promote self-regulation and learning strategies (Cambridge International Education Teaching and Learning Team, n.d.). Teachers can prompt students to use these handouts during or after a learning task to develop awareness of their own cognition as well as problem-solving strategies.

Supporting Psychosocial Functioning

There are a variety of psychosocial issues that are important for counselors to consider in the context of gifted students in urban schools. That said, gifted children do not suffer from psychosocial difficulties at greater rates than their nongifted peers (Cross & Cross, 2015; Martin et al., 2010). There are, however, unique factors to consider when a student transitions from being someone who has higher achievement than their peers to being a gifted student with a robust academic identity. In this section, we review a select few psychosocial topics as they relate to gifted youth in urban settings. We also describe two theoretical models that have been used to frame this issue for minority populations: cultural ecological theory (Ogbu, 1989, 2004; Ogbu & Simons, 1998) and stereotype threat (Aronson & Steele, 2005; Steele, 1997).

Cultural Ecological Theory

Cultural ecological theory (CET; Ogbu, 1989, 2004) suggests that historical racism and contemporary discrimination communicate to some youth from ethnic-racial minorities that education will not have the same utility for them that it does for European Americans. The perceived lack of utility can lead to disengagement from school and low effort in academic activities. CET also suggests that schooling itself can become symbolic of societal oppression, leading some students from ethnic-racial minorities to believe that if they do well in school, they are betraying their cultural heritage by acting White (Ogbu, 2004). Although controversial and unsupported in several empirical investigations (e.g., Cook & Ludwig, 1998), Ford and colleagues (2008) found that about 80% of gifted and nongifted African American students described acting Black as nonachievement-oriented in contrast to acting White. These findings suggest that students from ethnic-racial minorities might believe that they have to choose between an academic identity and their ethnic-racial group identity (Graham, 2004; Worrell, 2010).

Stereotype Threat

Whereas CET proposes that students make choices to disengage, stereotype threat (ST) suggests that negative group stereotypes (e.g., minority status of Latinx and African Americans in the United States, or low socioeconomic status) can result in members of those groups having lower achievement in contexts where the stereotype is made salient. Stereotypes are made salient at implicit and explicit levels just by exposing the stereotypic factor that relates to an individual's identity, for example, by asking for a student's ethnicity before taking a test.

ST can relate to lower achievement due to (a) academic disidentification with concomitant lower effort, as it is better to be lazy than unintelligent, or (b) a preoccupation with confirming the negative stereotype of their group, leading to heightened anxiety and less cognitive resources for the academic task (Owens & Massey, 2011). Both pathways are conceived of as unconscious, and students who care about doing well (e.g., gifted and talented students) are hypothesized to be more vulnerable to ST. ST effects leading to lower achievement have been demonstrated with several groups, including African Americans, Latinx students, and individuals from low socioeconomic backgrounds. ST is an extremely robust phenomenon in the laboratory setting, but there are debates in the extant literature about its applicability and strength in real-world contexts (e.g., Cullen et al., 2004; Owens & Massey, 2011; Walton & Spencer, 2009). There are, however, simple and effective interventions that reduce the impact of stereotype on performance and support students' academic achievement.

Supporting Students as They Respond to Identity Threats

Both CET and ST provide theoretical explanations for lower achievement in students who attend urban schools. Several researchers have suggested ways in which these potential threats to the academic identity of urban youth can be countered. For example, Oyserman and colleagues (2003) found that African American and Latinx students who had dual identities—that is, a strong sense of belonging to both their ethnic-racial group and to the larger society—were less likely to be vulnerable to stereotype threat, suggesting that schools need to validate multiple identities in students.

Ogbu and Simons (1998) suggested several important strategies for schools to use to counter disengagement, including (a) actively working on building trust with students, (b) using culturally relevant pedagogy (cf. Ladson-Billings, 1995), (c) explicitly dealing with opposition or ambivalence to academic achievement, (d) showcasing appropriate role models, (e) having high standards for performance, and (f) involving parents. These strategies are useful from the early ele-

mentary school years, as students from as early as first grade are aware of negative stereotypes and can identify which students teachers think are smart and which are not thought of as such (McKown & Weinstein, 2002, 2003). All of these are areas in which counselors should be involved, both directly and in collaboration with teachers and administrators.

Several intervention studies have also provided some guidance in this area. Using the experimental paradigm, Cohen and colleagues (2006) showed that African American students in a treatment group who identified their most important values and wrote about why those values were important to them had significantly and substantially higher achievement than students in a control group who wrote about their least important values, an effect that was present up to 2 years after the intervention (Cohen et al., 2009). The intervention had no effect on European American students.

In another study, Cohen and colleagues (1999) showed that wise feedback, which included "an invocation of high standards and an assurance of the student's capacity to reach those standards" (p. 1302), alongside critical feedback on the task resulted in less perceptions of bias, greater motivation to use the feedback to improve performance, and greater identification with the task on the part of African American students. Again, the intervention did not affect European American students. Working with teachers is particularly important, as research indicates that students from ethnic-racial minorities are more likely to be affected by teacher expectations than other groups (Jussim & Harber, 2005; Weinstein & Worrell, 2016). These studies provide some strategies that counselors can use when working with students and in inservice training that they provide to educators. Teachers can provide wise feedback by giving feedback that is specific (e.g., "I have given suggestions for how to improve the flow of your argument."), demonstrates high expectations (e.g., "Once you make these revisions, your paper has potential to be shared as a model for the class."), and states confidence in the student's ability (e.g., "Your last paper demonstrated your clear and persuasive writing abilities, so I know you can do it!"; Greater Good in Education, 2020).

The Big-Fish-Little-Pond Effect

One of the more consistent findings in the research literature on gifted and talented youth is the big-fish-little-pond effect (BFLPE; Marsh & Hau, 2003). In simple terms, individuals report lower academic self-concepts in more competitive academic environments, such as gifted and talented programs. Although there is no evidence that the BFLPE substantially affects students' academic behaviors, it is possible that students from ethnic-racial minority and low-income backgrounds may be more susceptible to these drops in academic self-concepts for a variety of

reasons, including lower educational capital in their families, less-developed academic identities, their underrepresentation in the gifted and talented program, the conflict between their academic and social identities as suggested by CET and ST, and greater self-doubts about their ability to succeed academically. Thus, the BFLPE is an important variable for counselors working in urban schools to consider.

Self-Efficacy

Self-efficacy is a person's subjective judgment about their own ability to perform a behavior. Simply put, it can be understood as a student's confidence that they can perform in a certain domain. Considering phenomena such as CET, BFLPE, and ST, gifted students in urban settings are in particular need of mastery experiences that reinforce their belief in their ability to perform. Developing self-efficacy is especially relevant for students who might struggle more in gifted classes than in other academic settings, due to the increased academic demands or the BFLPE. Counselors can support small and large opportunities for students to develop self-efficacy. For example, counselors can facilitate students as they act as tutors for students in lower grades, create instructional videos on concepts they have mastered, or participate in a schoolwide TED Talk on a topic of their choosing.

In Summary

Many of the interventions that have been proposed involve increasing the motivation and academic identification of gifted students in urban schools. Counselors need to be aware of the positive contributions of the multiplicity of motivation constructs—self-efficacy, intrinsic motivation, extrinsic motivation, hope in the future—on academic performance and work with teachers to assess these variables in their students and develop them as needed. Although research suggests that these variables are often already at optimal levels in many gifted students, they may not be as evident in gifted students in urban schools, especially if these are schools where academic achievement is not high and dropping out is more likely than graduating (Swanson, 2008). A final motivation variable that should be highlighted is Dweck's (2000) conception of ability framework. Students who believe that intelligence or ability is fixed are less likely to persist in the face of challenge and are more likely to reduce effort when facing academic challenges. However, individuals who believe that ability is malleable and can be increased with hard work are more likely "to value learning over looking smart, to

enjoy effort and challenges, and to thrive in the face of difficulty" (Dweck, 2002, p. 39). Studies show that in urban schools, interventions can improve these conceptions of ability (Atwood, 2010).

Partnering With Families

There are several important variables related to the family. Although parent involvement has been identified as a major component in supporting students' school functioning, recent research suggests that parent involvement has positive effects on problem behaviors and social skills but not on academic achievement (El Nokali et al., 2010). Thus, in the context of urban youth, parent education may be much more important than parental involvement. Counselors can support families by offering resources to support the academic endeavors of their children (e.g., by providing opportunities for homework support or academic enrichment). Counselors can connect with parents and students to develop mutual goals for their children's future. Counselors can also act as a bridge between home and school to help the student identify and maintain an academic identity. Finally, counselors can work as a bridge between the school and parents to share lessons on metacognition, CET, BFLPE, ST, and other academic and psychosocial factors in students' lives.

Counselors can support parents as they navigate the K–12 education system. In urban schools, counselors also play an important role in helping parents of gifted children in two other critical ways. The first involves helping parents identify programs outside of the school context that serve academically gifted learners (VanTassel-Baska, 2007). A substantial number of gifted youth attend programs at museums, universities, and other nonschool venues, especially during the summer, but youth from urban schools are underrepresented in these programs. These out-of-school programs provide opportunities for youth to (a) engage in a wealth of enrichment and acceleration opportunities that are not available in their home schools, (b) meet other students of similar and different backgrounds who share the same academic passion, and (c) become part of an academic community, an important psychosocial aspect of learning (Sosniak, 1995). Second, programs based on university campuses also demystify the university for students and their families and make it a familiar place where individuals go to engage in academic pursuits.

School Context

Whole School

As every counselor knows, context is an important factor in psychosocial functioning. An important aspect of serving gifted students in urban settings is the framing of giftedness in the individual school. Counselors should work with gifted and talented education (GATE) teachers and school administrators to create a school climate that celebrates gifted and talented students across all domains, including academics. Schools that recognize winning a science fair or academic Olympiad as well as winning a sports game are on their way to creating identities that celebrate giftedness in all forms. Like athletic achievements, it is crucial that the celebration of academic giftedness be genuine and appropriate in terms of level of competition (e.g., within school, school district, state, regional, national).

A key factor of school climate is students' perceptions of safety. Are there differences in perceived safety by social or academic group? Although safety issues typically center on violence, bullying, and harassment—often on the basis of demographic characteristics such as race and perceived sexual orientation—they can also relate to the nature of participation and engagement in school activities. Do students from the mathematics club feel as safe as students on the football team? According to Cornell and Mayer (2010), "There is a body of evidence demonstrating that school disorder impairs learning and achievement" (p. 8). In other words, children and adolescents who do not feel safe at school not only are more likely to have higher rates of absenteeism, but also are often less able to display their true learning potential. Thus, in addition to concern about the school's response to academic achievement, counselors need to help schools create environments where students feel safe and supported in their educational pursuits.

A first step to creating safe school environments is to periodically administer anonymous school climate surveys. Data can be analyzed by academic achievement, gender, ethnicity, and/or socioeconomic status to better understand how students perceive school factors such as whether school is a safe place, with high expectations, that supports student autonomy and academic exploration. Collecting school-specific data is critical to informing culturally appropriate and meaningful change. If students have access to technology, then Google Forms, SurveyMonkey, or Qualtrics are simple tools that can be used to collect and analyze schoolwide or even grade-specific data. Another approach to evaluating school climate is for students to design their own questions about what they perceive as important school factors. Students can create and administer surveys, enter data, and analyze the results. Survey questions can be multiple choice, ask

students to rate variables on scales, or even include in-person interviews with students or administration. With guidance, a student-led approach like this can foster connection among students, investment in the school community, and the advancement of a whole-school inclusive climate.

Classroom Activities

Although whole-school interventions are important, issues of school and academic climate should also be addressed in smaller settings, such as classrooms or advisory periods. In addition to creating mastery experiences, another way to develop self-efficacy is through vicarious experiences. When students see others succeed, especially when the models are like themselves, they start to develop the confidence that they too can succeed. Thus, exposing students to role models they can emulate is one important intervention option. When working with urban youth, role models must also be individuals who are perceived as achieving success without betraying their cultural heritage (Ogbu & Simons, 1998). Activities such as identifying and conducting a research project on someone of the same gender or ethnic-racial background who has made major contributions to society are useful in this regard. One way to increase the representation of role models used for this activity is to ensure students select role models from different domains (mathematics, history, music, soccer, politics, etc.). Teachers can require that students evenly divide themselves among the different domains to ensure a diverse selection of role models and fields are represented. Locals from these fields may be called on to speak with the class and serve as mentors to students interested in their chosen fields.

Television and other media also provide options for intervening at the classroom or small-group level. For example, the film *Akeelah and the Bee* (Atchison, 2006) provides an example of an urban school context where outstanding achievement was not taken seriously until Akeelah's gift for spelling becomes clear to her, her family, her peers, and her teachers. The movie stresses the importance of hard work, perseverance, and integrity, and is a wonderful stimulus for a guided discussion over the course of a 1- or 2-week advisory period with middle and high schoolers. The spate of television shows on developing talent in dance, singing, and cooking, among others, also provides opportunities for discussions on the development of talents and the amount of work that it takes to be successful, as do many of the more popular shows that children and adolescents watch and the activities that they engage in (e.g., sports, videogames). Thus, teachers or counselors looking for materials to bring into the class may want to encourage students to bring in models they idolize from social media, YouTube, Instagram, storybooks,

or other channels. This way, students can share what motivates them and learn more about the people they admire.

Finally, counselors should consider what type of social opportunities exist for students to connect with likeminded motivated peers inside and outside of class. Talented students benefit from having high-achieving peers. The influence of peers especially develops as students move through the later years of schooling. Counselors can work with student groups and teachers to include social events, lunch clubs, buddy programs, or pizza parties for students to foster communities that are strong in academic identity and social support.

In Summary

In short, children and adolescents who are talented are expected to function in multiple environments, such as in their schools, classrooms, and families. An important role of counselors is to support students as they navigate their academic and personal lives to explore their interests and develop their talents. Counselors can work across contexts to ensure environments are supportive of academic achievement and exploration.

Conclusion

According to the American School Counselor Association (2019), "School counselors advocate for the inclusion of, and the participation in, activities that effectively address the academic, career, and social/emotional needs of gifted and talented students at all academic levels" (para. 6). Although our reading of the literature does not support the notion that gifted students have unique needs, we do agree that the role of the counselor in serving gifted students is broad and has potential for significant impact. We have highlighted several of these issues in this chapter and conclude by reiterating a point that we made at the beginning of the paper. The uniqueness of gifted students is not related to emotional or psychological difficulties; rather, their uniqueness is in their capacity for outstanding performance in the domain of their gifts. Thus, although much of the work of counselors involves helping individuals cope with problems, working with gifted students provides a unique opportunity for counselors to work on maximizing academic and psychosocial strengths and facilitating optimal functioning.

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CHAPTER 10

Supporting Gifted LGBTQ Students Along Paths to Freedom

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Life started to turn for school-aged lesbian, gay, bisexual, transgender, and queer/questioning (LGBTQ) youth in America in the 1990s, 2000s, and 2010s. Too long accustomed to antigay discrimination from adults and children in the community, and even to antigay bias from parents at home, many of these youth previously had come to expect second-class treatment at school (Heron, 1983). They remained in hiding, even from supportive school counselors (Baker & Campbell, 1998). Yet, with the last 2 decades' rise in LGBTQ antidiscrimination laws, LGBTQ-protective school policies, social openness from sexual-minority adults, and social networking among sexually diverse youth, school began to brighten for these students. Despite the continuing conservatism and sometimes reactionary effort in some U.S. school districts during the country's continuing culture wars—when students often could not learn about themselves through curricula or could not even say that they are from sexual or gender minorities (Meyer, 2016)—sexual-minority youth started to come out in their homes, schools, and communities and be recognized for their "averageness," and sometimes even for their strengths (Huegel, 2018).

In stepping up to support the needs of gifted LGBTQ youth actively, in a more positive and increasingly open era, school counselors face a steep learning curve, as well as numerous social and school restraints (Hutcheson & Tieso, 2014; Peterson & Rischar, 2000). However, if counselors can address these needs effec-

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tively, gifted sexual-minority youth can be supported along exciting new roads as they define themselves, come out with increasing frequency, develop impressive strengths, mature in a society filled with everything from homelessness to addiction to HIV/AIDS, liberate themselves from pervasive harassment in school and community, and pursue promising new vistas of self-assuredness and pride in LGBTQ-sensitive curricula, college majors, and careers.

Definitions

Counselors who have long labored to unlock the meaning of giftedness may be faced with another challenge as they learn the highly varied definitions of sexual-minority and gender-minority, or LGBTQ, students.

Lesbians are females oriented mainly toward other females in their identities, behaviors, and/or physical, romantic, and sexual attractions (Kinsey et al., 1953; Lesbian, Gay, Bisexual, and Transgender Community Center [LGBTCC], n.d.). The term *gay*, used previously to describe the whole sexual-minority community in America (Miller, 1989; Teal, 1971), now generally refers to males who are primarily sexually oriented toward other males in their identities, behaviors, and/or physical, romantic, and sexual attractions (Kinsey et al., 1948; LGBTCC, n.d.). Bisexuals are oriented substantially toward both genders in their identities, behaviors, and/or attractions (McLean, 2001; LGBTCC, n.d.). Transgender youth may be attracted to, or be sexually active with, either gender, but are perhaps most signified by their boundary-crossing gender identities, which find transgender girls identifying as boys and transgender boys identifying as girls (Beemyn, 2005; National Center for Transgender Equality, 2016).

In addition to these commonly heard L, G, B, and T terms, used for perhaps the largest and most researched youth, counselors should know some important and related Q, I, and A expressions. Self-proclaimed queer students, who may be lesbian, gay, bisexual, or transgender, are unified by their unabashed "nonheterosexual" status and their willingness to push forward nonheterosexual political goals (Sycamore, 2008). Questioning youth, another Q group, are not sure of their sexual orientations due to developmental reasons or cultural repression (Huegel, 2018). Intersex youth (previously called "hermaphrodites"), like queer and questioning students, may be of any sexual orientation. They are most noted for having genitalia, reproductive organs, hormones, or chromosomes that diverge from the gender-associated features of the rest of their bodies (Chase, 1997; InterACT, 2020). Agender students are those who do not identify as having a gender or any currently named gender identity (Flint et al., 2019). An additional A group, allied students, are heterosexual youth who step up and out to support one or

more of the LGBTQIA populations, with varying levels of risk to themselves (Broido, 2000; Burgess & Baunach, 2014). Sometimes, these populations are called LGBTQIA+ students, with the "+" referring to all other related groups. One such group is genderqueer youth, who identify as being divergent from traditional gender norms (Dahir, 1999).

These increasingly numerous definitions certainly reflect sexually diverse adults' and youths' constructive efforts to seek freedom through self-definition and self-determination. Even for supportive counselors, however, these same drives may prove challenging. For example, some gifted LGBTQ youth may be particularly early or strong in their self-definitions (Friedrichs, 2005a; Friedrichs & Etheridge, 1995; Tolan, 1997). Students may hope for their counselors to be strongly supportive of their expressed orientations and identities (Greene, 2006). However, before counselors can be of true assistance to these and other gifted sexual minorities, they must understand how each sexual-minority group and each group member self-defines (Friedrichs & Sedillo, 2019; Tolan, 1997). Counselors—like parents—may also be challenged by the fluidity with which some sexual-minority youth travel among the various sexual-orientation and sexual-identity labels (Foucault, 1978; Manzella, 2014).

Prevalence

The prevalence of gifted LGBTQ youth depends on which of the proliferating definitions one uses for "giftedness" and "LGBTQ." It also depends on whether one is looking at prevalence at the national or the school level.

National Prevalence

Far from utilizing a definitive, technical approach, which seldom exists in describing gifted LGBTQ students and their worlds, national researchers may use conservative, moderate, or liberal perspectives in calculating prevalence. With a conservative approach, researchers may adhere to a narrow definition of giftedness, such as one focused on intellectual performance, as well as a similarly limited definition of sexual minority, such as one based on open identification by teens as LGBTQ. Not surprisingly, these researchers would find a relatively low number of gifted LGBTQ youth. For example, if a narrow but traditional 2% of the K–12 youth population is considered intellectually gifted (Rimm et al., 2018), and if 3% of that gifted group is considered LGBTQ (a conservative estimate for sexual minorities' prevalence in the general population, based on these students' current or eventual self-identification, such as that promulgated by the Guttmacher

Institute [Billy et al., 1993]), then 0.06% of the overall youth population could be estimated to be gifted and LGBTQ. Considering projected, overall pre-K–grade 12 school enrollment in the United States for fall 2020, that 0.06% would translate to about 34,000 students nationally (National Center for Education Statistics [NCES], n.d.). With a moderate approach to prevalence, researchers might adhere to a somewhat broader definition of gifted, such as the 6% of students who are actually enrolled in school gifted programs (NCES, n.d.), as well as the long-stated 10% of youth who someday will primarily be sexual minorities in their sexual behaviors (Kinsey et al., 1948, 1953). With a moderate approach, about 0.6% of students nationally, or 340,000 youth, would be considered gifted LGBTQ. Finally, researchers with liberal perspectives might have broad definitions of both gifted and sexual minorities. If investigators used the 6% currently involved in school gifted programs along with a very broad definition of LGBTQ, such as the approximately 30% of those who will have significant same-sex attractions, behaviors, or identities sometime in their lifetimes (Kinsey et al., 1948, 1953), then 1.8% of the K–12 student population, or 960,000 students, could be considered gifted LGBTQ.

Beyond the broad theoretical definitions of LGBTQ and gifted, gifted LGBTQ youth could be even more numerous in actual gifted programs. In fact, in a study of 53 students (27 girls and 26 boys) in LGBTQ youth support groups in schools and community centers in seven U.S. metropolitan areas (Friedrichs, 2005b; Friedrichs & Etheridge, 1995), a remarkable 36% of these LGBTQ youth (about 24% of the boys and 48% of the girls) were enrolled or had participated in programs for the gifted. If about 6% of American students were in gifted programs, and 36% of LGBTQ youth nationwide were in those programs, then a fairly sizable 2.2% of the nation's students could be considered gifted LGBTQ.

Individual School Prevalence

Whether national numbers for gifted LGBTQ students are based on narrow or broad definitions of giftedness or sexual minorities, or on actual participation in gifted programs, there may not be many gifted LGBTQ youth in a given school (Cohn, 2002; Friedrichs & Sedillo, 2019). With a conservatively circumscribed 0.06% or 1 in 1,700 students, there may be only about one gifted LGBTQ student at a fairly large American high school. Using the most broadly defined 2.2% (22 of 1,000) national representation for gifted sexual minorities, there may be a much larger gifted LGBTQ student contingent (about 37 of 1,700 youth). However, this more extensive group still translates at a large high school to only about nine freshmen, nine sophomores, nine juniors, and nine seniors who may be from gifted sexual minorities, in each grade of about 400 students. Even with

this larger number of gifted LGBTQ peers, the individual gifted LGBTQ student may feel quite isolated in trying to find other students who hold the important but very often hidden identities of gifted and LGBTQ (Cohn, 2002; Sedillo, 2015). As in generations past, such youth may feel themselves to be "the only ones in school" (Borhek, 1979; Peterson & Rischar, 2000). This feeling may be especially true for students of color, who may feel especially silenced or erased (Truong et al., 2020a, 2020b; Zongrone et al., 2020a, 2020b). Even with a fairly expansive definition of gifted LGBTQ, then, a school's limited number of gifted sexual-minority youth may constrain gifted LGBTQ individuals from expressing who they really are. This feeling, in turn, may create a significant challenge for counselors who wish to make these youth feel "normal" (Peterson & Rischar, 2000; Sedillo, 2015; Tolan, 1997).

Strengths

Not surprisingly, with their wide-ranging strengths, gifted LGBTQ youth have a spectrum of at least seven broadly based needs that should be addressed if their gifts are to be fully realized. As with any high-potential student (Clark, 2013), these youth have intellectual, achievement, aesthetic, spiritual, social, physical, and emotional needs. Although there have been few studies of the educational strengths of gifted transgender or questioning students, there have been inquiries into the strengths of gifted lesbian, gay, and bisexual youth. Summarizing a three-stage study of LGB youth (Friedrichs & Etheridge, 1995), Friedrichs (1997) found repeated patterns of strengths and needs in these seven areas among three different research populations: (a) subjects of biographies and autobiographies, which examined the teen years of 24 eminent 20th-century gay, lesbian, and bisexual people; (b) 30 gifted LGB college students self-reporting on their teen years; and (c) 53 LGB teens in high school-based and community-centered social-and-support sexual-minority groups, self-reporting on their current needs. At each stage, the researchers analyzed male and female participants' responses, knowing that those groups would almost certainly show some important differences, noting those triply supported needs and approaches seen in a majority of the high school and college samples and in two or more members of the historically eminent male or female groups. This research was later supported by an in-depth interview-based study of four gifted gay males at a state school for the arts (Friedrichs, 2005a).

Male Strengths and Needs

Overall, according to their triply endorsed items (Friedrichs, 1997; Friedrichs & Etheridge, 1995), the young gay and bisexual (GB) men wished for a range of intellectual, aesthetic, and emotional stimulation and wanted to break out of slow-moving school curricula and "spiritually empty" school assignments. They also wished for the freedom to pursue social and physical outlets for pent-up energy and frustration.

In their intellectual needs and preferred educational approaches, the gay and bisexual males desired diversity. Specifically, they wished for culturally variegated texts, activities, and community speakers. In their achievement patterns, the intellectually curious young males wanted far more than just cosmetic curricular adjustments from teachers and counselors. Instead, they preferred studying in their areas of passion, learning from community mentors, and accelerated programming, including grade-skipping.

In aesthetics, the participants also wished to achieve thoroughly stimulating environments, in school and community, in both arts and music—educational areas that continued to disappear in the American landscape of the 2010s. In spirituality, the often-sensitive respondents posed a strong challenge for counselors and teachers (above and beyond their sexual orientations) as the youth strove to extend their consciousness beyond the usual curriculum. They often wanted to delve into areas of spiritual development with wide-open discussions of moral and spiritual values.

In social development, the thoughtful participants wished for more help from educators than just in classroom discussions. They wished to be able to speak to educators about their own emerging identity development, in their struggles with parents and peers over that growth, and in their searches for future colleges and careers that might honor that identity. Often feeling isolated at school, they wished for more social support from their educators, indicating it was helpful when teachers accepted loners.

In physical development, the respondents, although wishing for more social integration, also desired recreational outlets to release physical energy and social frustration. As in modern times, they wished for more individual physical development and individual sports. They wanted to get away from school pressures and tensions.

Emotionally, the young gay and bisexual men overwhelmingly preferred class discussions and personal discoveries regarding various human sexual behavior patterns, seeing these dialogues and explorations, with their inevitable self-revelations, as helpful rather than stressful. Unfortunately, general and gifted education curricula, which treated the male participants fairly well on academics, let them down

on sex education, a topic so essential to their very being. Nevertheless, the young men already appeared familiar with some sexual diversity, having sought out members of sexual minorities as friends (an opportunity increasingly available today with LGBTQ school support groups). Overall, in sexual orientation and in other areas of emotional development, these students had to search independently for both personal happiness and a career. However, these men were also open to discussion from parents, teachers, and counselors (when those discussions happened to occur). They especially appreciated parents who pointed out gay role models as well as various adults who offered information on pro-LGBTQ counseling.

Female Strengths and Needs

Like their male gay and bisexual (GB) counterparts, gifted lesbian and bisexual (LB) females generally wished for intellectual stimulation, academic achievement, aesthetic experiences, metaphysical growth, physical outlets, and socially empathetic and emotionally supportive classmates (Friedrichs, 1997; Friedrichs & Etheridge, 1995). Not surprisingly, their specific needs within each category differed somewhat from the males' needs.

In their intellectual needs, gifted LB females were very inquisitive—a built-in challenge for them, then and especially now, when "correct answer" tests proliferate. They wished their dreams and fantasies to be addressed through teaching approaches that nurtured intuitiveness and used fantasies. They also needed to explore the environment, in intellectually challenging settings, with unorthodox ideas and unusual mentors, new subject matters, and independent studies. The young women reacted to their environments through writing and appreciated classroom opportunities to express their feelings on social issues. In achievement, the intellectually acute girls wished to excel academically, and they desired accelerated coursework as well as other challenging school experiences, a desire that would surely remain today with the proliferating college attendance opportunities. They appreciated encouragement toward higher goals and looked forward to academic groupings with high-achieving peers.

Aesthetically, similar to today's LGBTQ youth, who wish to do more than fall into line, the gifted LB girls had desires that went beyond simple, "straight-ahead" academics. The young women wished for many experiences with beauty—in painting, singing, mimicry, and other activities—as well as for opportunities to explore beauty in everyday life. In spiritual development, the thoughtful, aesthetically oriented young women wished to explore various religions and spiritualties. As with today's questing, discussion-seeking LGBTQ youth, they appreciated new information on these perspectives. These girls wished to branch out beyond organized religion to directly assist others in the community. They often expressed

their community service interests in class discussions, and especially enjoyed spiritually related discussions that educators made relevant to them as individuals.

Physically, perhaps as a counterpart for their metaphysical consciousness, and presaging the significant growth in women's sports and fitness, the girls needed outlets for aggression. They especially benefited from ample, varied recreational activities. Socially, to suit both their reflectiveness and assertiveness, and to reflect modern individuality, the young women needed to separate themselves from other girls and to develop their own perspectives on peers and acquaintances as well as on morals and social roles. They appreciated learning about others' ideas and feelings. They also appreciated individual instruction and wished to grow toward self-control. On their march toward self-governance, they further very much wished to observe role models, especially lesbian ones.

Emotionally, these young "explorers," like many gifted risk-takers today, had various wishes for their self-images, independence, sexual development, and peer and parent relationships. They especially felt that others' positive mentions of sexual minorities could help them. In addition, they wished independence and appreciated teachers' training and encouragement toward that goal. Sexually, the girls had already been attracted to same-sex persons, and they appreciated teachers' nonjudgmentalism regarding sexual orientation, in both instructional comments and course curricula. Where possible, the participants desired affirmation and approval for being lesbian, desires that today are expectations for some students. They also wanted information about sex, especially printed materials and positive peer discussions about sexuality. In broader peer relationships, the young women generally had friendly relationships. They appreciated educators' encouragement of these friendships and of students who sought out highly varied acquaintances. The young women desired more constructive relationships with their mothers and fathers, and they very much wished for their parents' affirmation and approval for their sexual orientations.

Societal Challenges

Gifted LGBTQ students truly need their spectrum of strengths to battle societal and school obstacles. Although school counselors may find these youths' societal problems less addressable than their school challenges, counselors' knowledge of the societal problems—increasingly expected in some school districts—may help them to better support the whole child. Several doggedly persistent societal barriers include homelessness, substance use, HIV/AIDS, and suicide. Each of these problems can be described in threefold fashion, in terms of their extent for youth, their challenge to counselors, and their solutions for counselors.

Homelessness

LGBTQ students have long experienced homelessness sometime in their teen years (Human Rights Campaign, 2017; Remafedi, 1994), often due to parental and school rejection of their sexual orientations or gender identities. The effects of this homelessness are extensive (Human Rights Campaign, 2017). For example, LGBTQ youth report homelessness at a 120% higher rate than youth identified as heterosexual and cisgender. LGBTQ youth also constitute up to 40% of unaccompanied homeless children and young adults. Life for these LGBTQ youth remains fraught with the dangers of chemical dependency and sexual exploitation. Today, although sexual-minority children and young adults may be able to move to friends' homes for somewhat healthier environments, they still may lack the school time and teacher support needed to develop full academic, creative, and leadership potential (Maslow, 1968).

Counselors who engage with LGBTQ and other homeless youth face daunting challenges related to the schools' disconnectedness with the streets (Human Rights Campaign, 2017). Counselors may find it very hard to communicate productively with the police, with street-centered social service personnel, or with adults who may be hosting sexual-minority youth in their homes.

However, if counselors can connect with gifted LGBTQ youth productively through the police or through the pro-LGBTQ social service agencies and home-host programs growing steadily in major urban areas (Avenues for Youth, 2017; Reclaim, n.d.), they might better encourage youth to go back to school and sometimes to home. Counselors may have increasing success, with help from these agencies and individuals, in supporting these youth through plans of advanced courses, stimulating mentorships, and creative or leadership experiences (Friedrichs, 2019).

Substance Use

Like homelessness percentages, substance abuse rates for LGBTQ youth appear to have diminished very little compared to 3 decades ago (Remafedi, 1994). The odds of heavy use for LGBTQ youth compared to heterosexual youth are 60% higher for alcohol, 190% higher for injected drugs, and 300% higher for cocaine (Human Rights Campaign, 2017). As with homelessness over 30 years, problematic substance use rates seem higher for LGBTQ youth than for heterosexual youth (Homelessness Policy Research Institute, 2019; Human Rights Campaign, n.d.). One Massachusetts study that compared LGB youth to straight youth in the 1990s, for example, found that sexual-minority students were 4 times more likely than heterosexual youth to have used marijuana, 6 times more likely

to have used cocaine, and 5 times more likely to have used other illegal drugs frequently (Faulkner & Cranston, 1998). In addition to traditionally problematic substances, such as alcohol and tobacco (Remafedi & Carol, 2005; Washington, 2002), contemporary LGBTQ students now have more access to chemical "freedoms" of party (or club) drugs, steroids, and tranquilizers (Autrey, 2005).

As in previous generations, counselors—confronted by a quickly evolving array of identity development, clinical, and treatment challenges with LGBTQ youth (Substance Abuse and Mental Health Services Administration [SAMHSA], 2012)—may feel powerless at times to prevent LGBTQ youths' drug-related escapes from societal pressures (Remafedi, 1994). As with the title character in the film *Love, Simon* (Berlanti, 2018), these youth often feel pressures to either be closeted and "live a lie," or to be "out" and thereby risk rejection from even those closest to them (Autrey, 2005). It is a no-win choice to which gifted LGBTQ children may be highly sensitive (Friedrichs, 2005a).

With strong relationships with gifted LGBTQ substance users, however, counselors can make a difference in their "using" behaviors. Beyond that, counselors need to learn more about the effects of the spectrum of drugs, old and new, on the general LGBTQ youth and adult population and on specific sexual-orientation and gender subgroups (Russell et al., 2002; SAMSHA, 2020). For gifted LGBTQ youth who seek escape from anti-sexual-minority pressures, counselors can make their offices into safe zones, complete with "safe zone" or rainbow stickers. There, students can confidentially come out (Lane & Navarro, 2013), can learn about changing social mores that can facilitate eventual LGBTQ success, and can find out about chemical-free Queer Proms and other LGBTQ teen special events to attend and possibly organize (Most, 2019).

HIV/AIDS

Like homelessness and substance use percentages, rates of HIV/AIDS infection have remained concerning among youth ages 13 through 30, despite societal changes and treatment improvements. In some urban pockets of young men and persons of color, infection rates can still be high (Minnesota Department of Health, n.d.), despite many LGBTQ youth today being much more aware of transmission risks. With access to new preventative as well as treatment drugs that can extend lifespans (JustUs Health, n.d.), contemporary LGBTQ students may feel fewer direct, threatening, health-related pressures than in previous years to "stand up and stand out" academically, creatively, and through leadership (ACT UP Maine, 1990). Despite less-pressing circumstances, counselors today can still have as much trouble as in the past in conducting HIV/AIDS education and in engaging the minds of these LGBTQ youth. They may have challenges in

lifting the self-esteem near the core of some high-risk sexual behaviors (JustUs Health, n.d.; Remafedi, 1994). Counselors may have particular trouble in telling gifted students—some quite confident in their sexual behavior and very averse to "preaching"—about healthy patterns of sexual behavior, and a more positive and developmentally appropriate approach may be helpful (Tolan, 1997; Youth and Aids Projects, n.d.). Finally, counselors may not be allowed, even in schools with many gifted students, to provide these youths with all of their desired sex education information (GLSEN, 2017; "Health Education in New York's Schools," 1997). Among Millennials surveyed in 2015, only 12% reported that their sex education classes covered same-sex relationships (Jones & Cox, 2015).

Counselors can effectively connect with gifted LGBTQ students in several ways. They can build student self-esteem through discussions of strengths, can provide ample and current information on HIV/AIDS, and can offer information on sites for prosocial LGBTQ teen dances and socials (Friedrichs, 2005a).

Suicide

With all of their societal challenges, gifted LGBTQ youth, not surprisingly, seem to be at an elevated risk of suicide. Although gifted students overall may have suicidal tendencies and behaviors that appear no greater than for the general youth population, experts continue to urge gifted educators to watch out for gifted youth with depression and other frequent cofactors of suicide (Cross & Cross, 2018). LGBTQ students, on the other hand, have long been noted for considerably higher suicide rates than for youth as a whole (Gibson, 1989). Recent studies, based on nationally representative samples, have verified that LGBTQ youth do indeed have higher than usual rates of suicidal ideation, plans, and attempts (Russell, 2003), with LGBTQ population differences noted among sexual orientations (Bagley & Tremblay, 1997) and among races (Aronmolate et al., 2017). Although there may be fewer harassment-related suicides among gifted LGBTQ teens noted in the press in recent years, compared to the cases of cyberbullied Rutgers violinist Tyler Clementi, Texas honors student Asher Brown, and other youth in the early part of the millennium (Clayton, 2000; Foderaro, 2010), there may be considerable danger to LGBTQ children ages 10–13. Two-thirds of these students who died by suicide were bullied before their death (Azad, 2020).

Dedicated counselors will undoubtedly feel challenged to undo the pervasive, LGBTQ-related isolation and harassment that, according to eight studies encompassing 83,000 students, often seem near the root of such suicides (Reis & Saewyc, 1999). They may feel powerless to deal both with the strong societal roots and the many school manifestations of this loneliness and bias.

Counselors wishing to honor those gifted LGBTQ youths' sensitivity and reduce their suicides, however, can take helpful emotional, social, and curricular steps. Emotionally, they can display sensitivity to sexual-minority issues, can intervene decisively in harassing situations (Kull et al., 2017; Reis, 1997), and can be trained on what to say in suicidal situations (Sandoval, 2002). Socially, they can start Gay-Straight (or Gender-Sexuality) Alliances, or GSAs, as forums for building togetherness, self-esteem, and empowerment among sexual minorities and their allies (Friedrichs, 2007). In curriculum, they can advocate for HIV education and a range of subjects that thoughtfully integrate LGBTQ topics and people more thoroughly and positively into the school day (Friedrichs, 2005a; GLSEN, 2019).

Challenges in School

Gifted LGBTQ students, affected by the physically related societal challenges of homelessness, substance use, sexually transmitted diseases, and suicide, may also be targets of many psychological challenges. These challenges, to which counselors can respond with some impact, include physical and verbal harassment, school attendance problems, unstimulating curriculum, and college and career search difficulties. Sadly, these school phenomena remain precursors to an adult life that still features harassment, job discrimination, income inequities, and hate crimes (Human Rights Campaign, 2020). However, even if school counselors are better positioned today to help gifted LGBTQ youth with these fundamental in-school challenges, these problems remain daunting among some U.S. geographical, racial, sexual orientation, and gender identity groups (GLSEN, 2017; Savin-Williams, 1994; Truong et al., 2020a, 2020b; Zongrone et al., 2020a, 2020b).

Physical Harassment

Rates of physical harassment and assault among LGBTQ students have remained high in the last 25 years, with 80% of students self-reporting harassment or assault during secondary school (GLSEN, 2017). A decline during the 2000s and early 2010s—one that unfortunately leveled off in the late 2010s with the growth in harassment of various nationalities, religions, and sexually diverse groups (GLSEN, 2017)—may be connected with higher numbers of school districts enacting rules to protect all students from physical violence, harassment, and bullying (Kull et al., 2015). This decrease may also be related to several large, successful lawsuits lodged in the 1990s and early 2000s by young victims of

anti-LGBTQ school violence (e.g., *Henkle v. Gregory*, 2001; *Nobozny v. Podlesny*, 1996). With the drive for justice and the talent for organization seen in many gifted LGBTQ youth and adults, especially once they have the opportunities for leadership (Friedrichs, 2005a; Movement Advancement Project, 2009; Peterson & Rischar, 2000), some students and parents in recent years bravely stepped forward to notify school districts to redress the children's physical abuse and harassment. Unfortunately, some administrators have ignored the warnings, and LGBTQ students absorbed further punishment; subsequently, parents and children sued and won based on negligence (e.g., *Henkle v. Gregory*, 2001; *Nobozny v. Podlesny*, 1996).

Some of today's LGBTQ-sensitive counselors may feel encouraged by the new rules, which militate against antigay physical violence and for LGBTQ safety. Admittedly, longstanding and fairly recent LGBTQ-supportive school regulations and professional guidelines may have empowered counselors to better educate sexual-minority youth on their rights to report anti-LGBTQ violence (e.g., American Counseling Association, n.d.; Conger, 1975). These rules and recommendations may also encourage counselors to better inform administrators of their responsibilities to act on student reports about violence (GLSEN, 2010). Counselors may also be able to inspire leadership-oriented gifted LGBTQ youth to organize safe-school petitions to administrators. In addition, counselors may now better educate anti-LGBTQ violent perpetrators and assign them consequences. They also may be able to push administrators to begin schoolwide antiviolence programs (Kull et al., 2017). Verbally skilled gifted LGBTQ youth may be particularly good candidates to educate peers and push for antiviolence programs (Friedrichs, 2005a).

What counselors cannot easily do is replace the self-esteem that reporting LGBTQ youth need, but which these students may have lost due to continual antigay battering at school and home. Such self-esteem is especially needed by youth wishing to report antigay harassment in those many U.S. states and school districts that still vary widely in deciding on basic human rights for LGBTQ people and on requiring varying levels of training to help their youth (Human Rights Campaign, 2020). Not surprisingly, these often are states and systems in which youth and adults may be physically harassed especially frequently (Human Rights Campaign, 2017; Meyer, 2016). However, through inclusive and comprehensive curricula, proactive counselors can explain effectively to sexual-minority youth, especially to gifted ones, the social contexts of anti-LGBTQ discrimination (Friedrichs, 2005a; GLSEN, n.d.) and can brainstorm with them some current solutions to harassment (Cohn, 2003).

Verbal Harassment

If school-based physical harassment rates have diminished a bit in recent years, verbal harassment percentages have remained stubbornly high, hovering in some studies for the last 35 years at around 80% of teens or adults who self-report harassment in middle and high school (Gibson, 1989; GLSEN, 2017). Overt name-calling, putdowns of sexual minorities in class discussions, and ever-present comments of "That's so gay" remain among the most common anti-LGBTQ epithets heard by sexually- and gender-diverse youth (GLSEN, 2017). Even gifted students freely admit to their bias against LGBTQ youth, with 40% of the students honored in one edition of *Who's Who in America* acknowledging that bias, far more than their acknowledgment of bias toward any religious, racial, or ethnic group (Treat & Whittenberg, 2006).

As with physical harassment, gifted LGBTQ youth, like other underrepresented groups, could be particular verbal targets because they may be more open and more prideful about being divergent (Friedrichs, 2005a). With the advent of cyberbullying, verbal harassment has become somewhat more expansive, moving beyond the anti-LGBTQ school environment into the former "safe haven" of home. In fact, Iowa researchers found that 54% of 94 LGBTQ subjects had been cyberbullied in the previous 30 days (Magid, 2010). With the great sensitivity of gifted LGBTQ youth (Cohn, 2003; Friedrichs, 2019), these underrepresented students may be particularly susceptible to depression (Kerr & Foley-Nicpon, 2002) and sometimes suicide (Cross & Cross, 2018).

In some schools today, with increasing rules against harassment, counselors should be empowered to respond to the many obviously harassing anti-LGBTQ incidents seen by educators. Increasingly, LGBTQ and other underrepresented students can seek homeschooling options if they feel isolated. For their part, when counselors actually "do something" to respond to anti-sexual-minority taunts, they can help to build relationships with LGBTQ students. These relationships, in turn, may result in better social and academic outcomes for these youth (GLSEN, n.d.; Russell & Rankin, 2005). Gifted LGBTQ youth may particularly feel that their openness, pride, and sensitivity is honored by "educators who try" (Friedrichs, 2005a, 2007). However, these same counselors may still lack the power to fully redress injustices in several other harassment-filled locations: (a) in hallways, on school grounds, and in other places with no witnesses to anti-LGBTQ activity (Bryant, 1993; Minnesota Department of Education, 2017); (b) in classrooms, where teachers rather than counselors are supposed to be reporters of harassment; and (c) in communities at large, where harassment often occurs but where teachers may feel pressed to remain silent amidst a homophobic citizenry that pays their salaries (Mazza, 2009; Reis, 1997).

School Attendance Challenges

Especially when harassed, gifted LGBTQ students continue to be at some risk for school attendance problems, including dropping out and skipping school, as can be seen in statistics on both gifted and LGBTQ youth. Ever more frequently, LGBTQ and other underrepresented youth can seek homeschooling options if they feel isolated. For their part, the gifted have long been viewed as being at less risk for dropping out, compared to students as a whole, with approximately 19% of the gifted and about 30% of the general student population dropping out (Marland, 1972). Sexual-minority students, on the other hand, have higher than average dropout rates (GLSEN, 2017). Often, school dropouts, whether by gifted or LGBTQ students, may begin the road to dropping out by skipping school frequently. In fact, LGBTQ youth are 2–7 times more likely to skip school than the general student population (Reis, 1997). Some sexual-minority students of color may not attend school for significant periods of time (GLSEN, 2017).

Explanations for gifted LGBTQ school skipping seem to be similar to explanations for sexual-minority youth as a whole. LGBTQ students who skip express the isolation, alienation, and low self-esteem often connected with anti-LGBTQ verbal and physical harassment (GLSEN, 2017). They choose to migrate out of the school system, at least on a piecemeal basis. Some gifted, harassed, sexually diverse youth have experienced these same feelings (Friedrichs & Sedillo, 2019; Peterson & Rischar, 2000). These gifted LGBTQ students' feelings may be exacerbated by classmates who do not welcome giftedness.

Solutions to reduce LGBTQ school attendance challenges have centered on reversing the isolation, alienation, and low self-esteem near the core of the school attendance problem. Educators have attempted to reduce anti-LGBTQ harassment, increase safe integration with straight students, lift LGBTQ self-esteem, and educate sexual-minority youth about themselves (Friedrichs & Sedillo, 2019; GLSEN, n.d.). Often, multiple federal, state, and district mandates may be needed in the early stages, so that a problematic school district may eventually address effectively its often-sweeping anti-LGBTQ harassment and broader anti-LGBTQ inequality (Harbeck, 1997; *Nobozny v. Podlesny*, 1996). However, once basic safety supports have been enacted, programs can be devised to respectfully integrate LGBTQ youth with straight peers in purposeful, equitable interaction (Uribe & Harbeck, 1992). These programs, best created with a community's sexual-minority adults and young LGBTQ leaders themselves (Griffin & Oullett, 2002; Outfront Minnesota, n.d.-a), can work well when they include outreach to teachers and counselors. Teacher and counselor workshops can effectively teach educators how to protect LGBTQ youth from harassment (GLSEN, n.d.), how to create safe zones for LGBTQ-affirming conversations (Perrotti & Westheimer,

2001), how to lead GSAs (GLSEN, n.d.), and how to teach other educators to be pro-LGBTQ advocates (Uribe & Harbeck, 1992). For LGBTQ students who have long been out of school or who cannot wait for a district finally to encourage LGBTQ attendance at "regular" schools, alternative attendance sites can be developed, such as New York's 35-year-old Harvey Milk High School and Dallas's former Walt Whitman High School, both focused on LGBTQ youth (Clare & James, 2005; Colapinto, 2005).

School Curriculum

To truly function effectively, LGBTQ youth, like students from other culturally diverse groups, need to do more than just attend school and perform well academically. They need information about themselves to grow in pride of their dual identities (Wexelbaum & Hoover, 2014) and to gain knowledge about how to live their lives beyond high school. Gifted LGBTQ youth, with their curiosity about themselves and their desire to plan for the future, may particularly wish for this information (Friedrichs & Etheridge, 1995). The burden on curricula to help develop self-esteem and knowledge may be even higher with gifted LGBTQ and other sexual-minority students than with some other groups. Sexually diverse youth, unlike other groups, may often be raised by parents who are not like themselves in sexual orientation and gender identity, parents who cannot easily convey to their children basic information in support of sexual minorities (Jennings, 2003). To compound the problem of parents' lack of pro-LGBTQ information, these youth often lack any LGBTQ-sensitive school curricula (Friedrichs, 2014; Sears, 1999). In some districts, there long has been a prohibition against the mere mention of homosexuality, while in other systems and even states, there have been vague but ominous rules against the "promotion of homosexuality" (Friedrichs, 2014; Harbeck, 1997). In yet other districts, which lack such regulations, educators may continue to avoid discussion of LGBTQ topics for five longstanding reasons related to comfort with and knowledge about those topics: (a) school policies have no affirmative guidelines on the acceptability of mentioning homosexuality (Sears, 1999), (b) fellow educators simply choose to avoid LGBTQ issues (Sears, 1999), (c) counselors and teachers themselves feel fundamentally undereducated on those matters, (d) there is an insufficient "security belt" of open LGBTQ educators and allies to support those brave educators who do wish to discuss LGBTQ issues (GLSEN, 2010), and (e) teachers and counselors lack basic training programs on how to show LGBTQ support (Society for Sexual, Affectional, Intersex, and Gender Expansive Identities [SAIGE], n.d.). Some of these aspects have improved in recent years, such as the security belt of multiple supportive

educators for many students (GLSEN, 2017) and increased teacher training on LGBTQ students (GLSEN, n.d.).

With all of those challenges understood, the school counselor may have some strategic openings to advocate for LGBTQ youth to various educators. At the elementary level, librarians may be interested in attaining, and counselors may be dedicated to using, an ever-increasing number of pro-LGBTQ-themed children's books (Seney, 2018). Although about 50% of elementary language arts teachers say that they know little of LGBTQ issues, approximately 80% state that they wish that they knew more (Flores, 2009). In the secondary grades, health teachers may discuss the similarities and differences in preventative health needs for straight and LGBTQ people (Telljohan et al., 1995), and may cover the needs of LGBTQ and straight people in a spectrum of family structures—structures that all should be honored (National Association for Gifted Children [NAGC], 2015). Social studies teachers may teach about the struggle for LGBTQ rights in America and worldwide (GLSEN, 2019; Grogan, 1992), LGBTQ people who contributed to world progress (Cowan, 1996; Feinberg, 1996), and LGBTQ youth openly living their lives today (Seney, 2018). Literature teachers may speak about eternal themes of love and loss through stories of sexual minorities (Seney, 2018). Gifted LGBTQ youth, who sometimes can be high achievers across the curriculum (Friedrichs & Etheridge, 1995), may very much enjoy excelling across the school day while learning about themselves. They may especially enjoy open discussions nurtured in some accelerated and gifted classrooms (Friedrichs, 2005b). On a very positive note, technology has allowed quick searches of the literature on even complex topics, easily facilitating students' independent studies on LGBTQ topics at school or home.

College Searches

Historically, some LGBTQ students have desired to enroll in college curricula that align with their abilities and dreams, while others have submerged their true identities to strive for stereotypically straight professions (NAGC, 2015). Depending on counselors' knowledge, many historically may or may not have been able to point sexual-minority students toward colleges that are the right fit, both educationally and socially (Heron, 1983). In recent years, however, sexual minorities have been more vocal in their preferences for LGBTQ-sensitive university towns, colleges, and college majors (Sanlo et al., 2002). With gifted LGBTQ students' academic ambitions and high professional goals (Friedrichs, 2005a), they may be particularly vocal in their preferences (Independent Educational Consultants Association, 2020; Sanlo et al., 2002). They know now what their predecessors knew only in retrospect—that choosing a college that honors both

giftedness and sexual-minority status can make a lifelong difference (Lovance, 1998).

Unfortunately, many counselors can be challenged by their students' increasingly frequent LGBTQ-specific college search demands. It may be difficult for either straight or LGBTQ counselors to learn all of these students' desired information about towns, universities, and majors supportive of sexual minorities. Counselors traditionally have lacked such information about the LGBTQ world, due to the separation of straight and sexually diverse people in educational and broader environments (SAIGE, n.d.).

Yet many metropolitan-area U.S. high schools now have some counselors or GSA coordinators who may be very aware of LGBTQ-supportive colleges and college-based LGBTQ or Queer Studies programs (Best Colleges, 2020). There are also several published guides to colleges that cater to sexually diverse students (e.g., Baez et al., 2007; Best Colleges, 2020).

Careers

Historically, gifted LGBTQ youth have wished to engage in careers as well as college majors that are both "typical" and "atypical" for sexual minorities (NAGC, 2015). If these students have had atypical interests, they may have felt reticent about asking their school counselors for advice on supportive universities.

Appropriate counselor advice might have led to affirmations of students' atypical job hopes, and, indirectly, to support of these youths' diverse sexual orientations (NAGC, 2015). In recent years, LGBTQ students have increasingly demonstrated the courage to state their career preferences. This courage has matched up well with some U.S. corporations' openness to hiring open and talented LGBTQ people. In reacting to this student courage and changing job world, however, counselors have not always addressed directly these youths' true academic, artistic, and leadership desires (Baez et al., 2007).

Some counselors today have taken it upon themselves to increasingly be aware of, sensitive to, and efficient in advising supposedly atypical careers (SAIGE, n.d.). Counselors can "fly their flags" in support of gifted LGBTQ youth by learning about those colleges and careers that cater to students with different interests, such as males interested in dance and LGBTQ youth devoted to athletics (Griffin, 1994; Hamilton, 1999). Counselors can then share their expertise with students and fellow counselors.

Overall Challenges and Solutions for Counselors Working With Gifted LGBTQ Youth

In addressing specific strengths and challenges of gifted LGBTQ youth, counselors have to deal with four more general concerns related to the counseling profession, administrative leadership, and community oversight: (a) counselors' own attitudes and knowledge base, (b) the extent of sexual-minority support from administrators, (c) the level of LGBTQ backing in communities, and (d) counselors' large caseloads and highly divided job roles.

Attitudes and Knowledge

If they are to serve gifted LGBTQ youth well, counselors need to have positive attitudes toward, and sufficient core knowledge about, both gifted and LGBTQ youth. They need to know about the secrets and stigmas involved both in being gifted and LGBTQ (Cross et al., 1991; SAIGE, n.d.). They should also know similarities and differences in identity formation processes for both populations (Armenta, 1999) and in developmental struggles that can be expected along the way for both groups—in coming out, in dealing with loss and anger, and in advocating publicly for "people like themselves" (Clark, 2013; Coleman & Remafedi, 1989; Thomas, 1999). Unfortunately, as with many other groups of educators, up to two thirds of counselors may have some negative attitudes toward LGBTQ students (Mollura, 2017; Sears, 1992). Counselors may be able to improve problematic attitudes and knowledge, however, through undertaking professional educator modules on these students (GLSEN, n.d.; Outfront Minnesota, n.d.-b). As with many gifted and LGBTQ inservices, these modules are probably most effective if they are built upon with subsequent training (GLSEN, n.d.; Rimm et al., 2018).

Administrators

Principals and superintendents are key players in creating policies that support gifted and LGBTQ students and that encourage policy compliance toward both groups (Jennings, 1994; Pace, 2009). Sadly, some administrators, who themselves may have negative attitudes toward sexual-minority students, may need to hear from strong advocates that they support LGBTQ students (Minnesota Department of Education, 2017). Such public advocacy may help to counterbal-

ance homophobic citizens or fellow school decision makers. Even if administrators are LGBTQ supportive, they may be unwilling to "make a big deal" out of addressing gifted LGBTQ youths' needs, such as the right to a school environment free of anti-LGBTQ language, for fear of making school-based bias worse against these students (Pace, 2009). Counselors can urge administrators to learn more about LGBTQ youth through administrator modules designed to improve attitudes (Southern Poverty Law Center, 2009). They can also advocate to administrators to support courageous LGBTQ teachers, who must simultaneously manage their own professional "coming outs" and their battles for their LGBTQ students' survival (Griffin, 1992). Further, counselors can encourage administrators to network with other districts' school leaders who have effectively advocated with school boards and the public on behalf of LGBTQ youth (Outfront Minnesota, n.d.-a). In addition, counselors can engage actively with LGBTQ-related parent and youth groups to learn about what administrative help would best serve a locality's sexually diverse youth (Jennings, 2003).

Communities

Cities and towns are also important factors in influencing how freely counselors can advocate for gifted LGBTQ youth, both directly and through administrators. Both large and small communities, especially in conservative U.S. states (Meyer, 2016), have been known to lodge anti-LGBTQ protests directly with school administrators or school board members. These protests, sometimes couched in Biblical references (Mazza, 2009), long have chilled schools' subsequent willingness to back pro-LGBTQ activities ("Gay Poster Stays," 1993; "Health Education in New York's Schools," 1997). Some counselors who wish to make LGBTQ-positive impressions on communities may choose to fold sensitivity-building toward sexual minorities into more general, schoolwide violence-reduction efforts (GLSEN, n.d.).

Caseloads and Professional Roles

Even supportive counselors may have trouble in meeting all of their non-LGBTQ responsibilities as they build knowledge and attitudes on gifted and sexual-minority youth and as they dialogue with administrators and communities so that these students may thrive. Counselors may have particular difficulties because of their large student-to-teacher caseloads (482:1, nationally) and their highly divided school roles (National Association for College Admission Counseling & American School Counselor Association, n.d.). They may be wise

to advocate (as best they can, in fiscally stringent times) for additional school counseling staff, particularly for those personnel specializing in areas related to gifted and LGBTQ student needs. Counselors may also advocate for other qualified school staffers, such as gifted educators, to take over some counseling aspects, such as career advice for gifted LGBTQ students. Sensitive counseling may be particularly helpful in sports and other areas wherein gifted LGBTQ youth are an especially discriminated-against minority (GLSEN, n.d.; Griffin, 1994).

Conclusion

Despite obstacles, there are inspiring and practical solutions for today's gifted LGBTQ youth—and for their counselors—as those students increasingly define themselves, come out, utilize their great strengths, break free from societal and in-school obstacles, and seek fulfillment in schoolwork and careers. Counselors who address these challenges can certainly inspire these youth toward happier, more independent lives. They can help move gifted LGBTQ students up from the rather hopeless days of yesteryear, when these youth often expected harassment, neglect, and ignorance at school, toward a brighter era, when these same students might hold hope for supportive, consistent, and liberating experiences from their counselors and other educators.

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CHAPTER 11

A Guide for Counselors Working With Gifted Transgender and Gender-Nonconforming Students

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Rising from the AIDS crisis of the 1980s and 1990s and hard won by activists, advocates and rebels, the last 3 decades have marked a turning point for lesbian, gay, bisexual, transgender, and queer (LGBTQ) civil rights. The introduction of antidiscrimination laws, protective policies, increased representation in popular culture and the launch of the Internet and social media have all greatly contributed to the empowerment of LGBTQ young people.

However, compared to their cisgender peers, transgender and gender-nonconforming (TGNC) students remain more likely to experience verbal and physical harassment (Daley et al., 2007; Grossman et al., 2009; Jones & Hillier, 2013; Kosciw et al., 2018; McGuire et al., 2010; Taylor & Peter, 2011), have higher rates of absenteeism due to feeling unsafe in school (Kosciw et al., 2013), and are less likely to report effective staff intervention into incidents of bullying and harassment (Pizmony-Levy & BeLonG To Youth Services, 2019). TGNC students who hold multiple marginalized identities are further exposed to forms of educational inequality that limit their ability to access educational resources, safe spaces, and peer support (Daley et al., 2007; Marine & Nicolazzo, 2014; Meyer et al., 2016).

Counselors face specific challenges when working with all gifted and LGBTQ youth (Friedrichs, 2012), and although it may seem useful to group together LGBTQ students in terms of educational policy and advocacy, distinguishing

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the needs of TGNC students is increasingly important (Jones & Hillier, 2013). Counselors may feel overwhelmed by evolving TGNC terminology, school constraints, or their ability to navigate divergent attitudes of school administrators, colleagues, parents/guardians, and other students. However, counselors who offer support and positive engagement with gifted TGNC students can have a significant effect on students' educational outcomes (Kosciw et al., 2013), their emotional well-being (Greytak et al., 2013), and other attitudes within their school or organization (Meyer & Leonardi, 2018).

Terminology

Terminology used to describe gender identity has shifted greatly within the last decade, and this can be attributed to several factors: increased general awareness of gender diversity (particularly in healthcare), a growing field of literature and research in the area, and the advocacy work and activism of the TGNC community (Coleman et al., 2012). Such a rapid evolution of language naturally leads to disagreement and debate, as terms and definitions shift or become outdated, or cultural viewpoints expand (American Psychological Association, 2015). Gifted students may be particularly strong in their self-definitions (Tolan, 1997); therefore, using inclusive language, including the right terminology, is an important step for counselors to create a safe and welcoming environment (Treat, 2017).

The term *transgender*, or *trans*, is used to describe people who do not identify with their gender assigned at birth, or who defy binary gender norms (McBride, 2020; Meyer & Leonardi, 2018). The acronym FTM is sometimes used for trans men, denoting female-to-male, and MTF for trans women, denoting male-to-female. However, when speaking to, or about, a TGNC student, it is more appropriate to simply refer to them by their affirmed gender and pronouns. The term *cisgender* relates to people who feel an alignment between the gender they were assigned at birth and their personal gender identity (Enke, 2012). *Gender-nonconforming* is an umbrella term and can be used to describe many different gender identities, including nonbinary, genderfluid, genderqueer, agender, and gender creative (Meyer et al., 2016). Many gender-nonconforming people do not identify singularly as male or female; however, it is important to recognize that their experience of gender construction will have been shaped by their gender assigned at birth. Gender-nonconforming people may use they/them pronouns, or a variety of others. The term *intersex* denotes a person who is born with biological traits (e.g., physical traits, sex chromosomes, or hormones) that do not align to singular male or female definitions. Someone who is intersex may also identify as gender nonconforming or trans.

The term *transitioning* is used to describe the stages a TGNC person may go through in order to feel more aligned with their affirmed gender identity. *Social transitioning* may include dressing or adopting mannerisms in accordance to societal expectations of gender (McGlashan & Fitzpatrick, 2018). This is the most common stage a counselor will encounter when working with TGNC students, as legal and medical transitioning is a much longer (and more private) process. *Legal transitioning* refers to the process of changing official identification documents and records to reflect affirmed name and gender (Collazo et al., 2013). For TGNC students, this may involve having official school records altered to reflect their affirmed name and gender. The concept of medical transitioning is one that has shifted greatly, as gender-related research and discourse has progressed. For much of the 20th century, healthcare for TGNC people was primarily focused on medical interventions that reinforced a binary conceptualization of gender, where the goal was to conform as closely as possible to the "opposite" sex and blend into the cisgender population (Bolin, 1994; Hastings, 1974; Hastings & Markland, 1978). It is only through the advocacy of TGNC individuals and communities, combined with advances in research and trans-affirmative care practices, that this has shifted to greater recognition of a spectrum of gender diversity (Coleman et al., 2012).

Gifted TGNC Students: Challenges

Counselors working to support gifted LGBTQ students should be cognizant that gender identity is independent from sexual orientation; TGNC students may identify as lesbian, gay, bisexual, or queer (Stryker, 2008), and they are often exposed to greater educational inequalities than their cisgender LGBQ peers (McBride, 2020).

Although there is no literature that specifically focuses on gifted TGNC young people, counselors can look to existing research on gifted LGBT or LGB students. Peterson and Rischar's (2000) retrospective study of the student experience of gifted and gay, lesbian, or bisexual young adults found significant themes of isolation, anxiety, and depression, together with high achievement and extreme involvement in activities. Hutcheson and Tieso's (2014) critical ethnography of the personal and social intersections of giftedness and LGBTQ identities had similar findings; 85% of the study's participants reported feeling different for being LGBTQ, 75% reported feeling different for being gifted, and 50% also expressed feeling scared or anxious about the social repercussions of their identities.

In order to support and empower gifted TGNC students, counselors must be aware of the challenges these students will likely face: personal (identity forma-

tion, developing social coping mechanisms), social (harassment, bullying), and those that may arise in an unsupportive, or ambivalent, school environment.

Identity Formation and Social Coping

In order for gifted TGNC students to develop a healthy sense of identity, they require developmental opportunities to grow in self-confidence, self-reliance, and self-understanding (Stewart, 2006). Gifted TGNC students may face identity struggles at a younger age than their peers due to accelerated cognitive development and the desire to pursue information about sexual orientation and gender identity (Friedrichs, 2012; Peterson & Rischar, 2000; Stewart, 2006).

Gifted students often face issues surrounding identity formation and healthy psychosocial development (J. R. Cross & Cross, 2017) and may engage in various coping strategies designed to mediate information available to peers, in order to avoid being stigmatized in social or academic situations (T. L. Cross et al., 1993). The continuum of visibility (T. L. Cross, 1997; T. L. Cross et al., 1991) is a framework that is particularly relevant for gifted TGNC students, who must choose whether to hide and deny, or express and embrace, their gender identity and expression. Students who are particularly sensitive will be acutely aware of the risk of harassment and discrimination and may engage in strategies of self-preservation by hiding their identity (Marine & Nicolazzo, 2014; Treat, 2010), developing disparate personal and private personas (Stewart, 2006), suppressing behaviors that are averse to their gender assigned at birth (Kerr & Cohn, 2001), or overcompensating for nonstereotypical gender behaviors with exaggerated mannerisms (Hutcheson & Tieso, 2014). The high level of energy required to maintain a mask of gender-conforming behavior is therefore energy not spent on the tasks of positive cognitive and social development (Stewart, 2006). Gifted TGNC students who do choose to come out must then balance their desire to not be misgendered—that is, to have others recognize and understand their gender identity and use their affirmed name and pronouns—with a desire for privacy and to avoid unnecessary (or negative) commentary from peers (Goldberg & Kuvalanka, 2018). Students may choose to actively conform to the stereotypical, and socially constructed, gender norms of their affirmed gender in order to fit in (Catalano, 2015). Hutcheson and Tieso (2014) found that the extent to which participants in their study hid their sexual orientation and gender identity was a conscious choice—an intellectual problem to be solved by using data to decide when and how to be open about it. The gifted LGB students in Peterson and Rischar's (2000) retrospective study struggled with the burden of being twice different, which was linked to anxiety, depression, and feelings of isolation. Although some students in each study used academic and athletic overachievement or over-

involvement in extracurricular activities as coping strategies, others engaged in self-destructive and risky behaviors in order to fit in (Hutcheson & Tieso, 2014; Peterson & Rischar, 2000).

Gifted TGNC students may experience difficulties in identity formation that are not necessarily connected to their dual identities, but rather stem from societal stigma and rejection by family, peers, and others (McGuire et al., 2010). Without adequate role models (Treat, 2017), students may form their conception of TGNC people from the media (Stewart, 2006), which often portrays TGNC people in a negative or salacious fashion (Friedrichs et al., 2017). The Internet and social media have greatly increased the availability and accessibility of gender identity information. One study on the experiences of nonbinary students attending a liberal arts college found that Tumblr, a microblogging and social networking website, was a particularly valued source of initial information about gender identity and the nonmedical and medical means of altering physical presentation (Goldberg & Kuvalanka, 2018).

Bullying and Harassment

Although gifted students can generally face difficulties with stigmas and stereotypes, it is important to recognize that these are mixed and less overwhelmingly hostile than those encountered by LGBTQ students (Hutcheson & Tieso, 2014). Transgender students report harassment at higher levels than their LGB peers, including physical harassment, verbal harassment, online harassment (including hate speech), and deliberate exclusion (Grossman et al., 2009; McGuire et al., 2010). Cisnormative violence, motivated by prejudicial attitudes toward trans individuals and perceptions of gender transgression, has been linked to a lack of acceptance toward trans identities and anxiety focused on "reading" the gender of others (Miller, 2015). This form of violence is regulatory, as it intentionally aims to police trans youth and punish those who disrupt gender binary norms (McBride, 2020). The regulating of TGNC identities may include pressure to conform to rigid stereotypes of masculinity (Kerr & Cohn, 2001) and targeted harassment of perceived feminine behavior (Daley et al., 2007; Plummer, 2001). The majority of TGNC students experience regular harassment at school (Kosciw et al., 2018), which can lead to high rates of absenteeism. Ninety percent of trans youth in Taylor and Peter's (2011) study reported hearing transphobic comments daily or weekly from other students, and almost a quarter (23%) reported hearing transphobic language from teachers daily or weekly. Jones and Hillier (2013) found that TGNC youth were also significantly more likely to have been physically assaulted due to homophobia than their LGBQ cisgender peers, and to have been exposed to other types of harassment and abuse, such as written notes,

rumors, graffiti, and social exclusion. Similarly, Kosciw et al. (2018) found that TGNC youth were more likely to experience harassment based on a combination of their gender expression and sexual orientation (real or perceived) than either factor in isolation.

In order to cultivate a positive school climate, TGNC-focused harassment must be targeted on an institutional level, by providing clear frameworks and expectations for intervention, and on an interpersonal level, by direct and consistent staff intervention (Meyer et al., 2016).

School Environment

Gifted TGNC students face many challenges in navigating the typical school environment, such as institutional cisnormativity (McBride & Schubotz, 2017), lack of protection for gender identity and gender expression in school policy (McGuire et al., 2010), organizational cultures that promote rigid adherence to binary gender roles (Goldberg & Kuvalanka, 2018), and lack of awareness of TGNC identities (Jones & Hillier, 2013) and how to navigate gendered spaces (e.g., bathrooms, locker rooms; Greytak & Kosciw, 2014; Ma'ayan, 2003).

Through consistent repetition, gender norms become entrenched in institutional settings to the point that they appear natural (Butler, 1999). This process of institutionalization directly forms organizational policies, practices, and cultures that (intentionally and unintentionally) promote rigid adherence to binary gender roles and serve to erase the experiences of TGNC students. TGNC students who attend a single-sex school (O'Flynn, 2016) or a school with a strict uniform policy (Jones & Hillier, 2013; Ma'ayan, 2003) disrupt the notion of stable gender categories and may have a particularly isolating experience. Several studies have found that school professionals can contribute to TGNC students' negative experience in school by repeatedly misgendering them and not using their affirmed name (Grossman et al., 2006; Jones & Hillier, 2013; McGuire et al., 2010). TGNC students in Sausa's (2005) study reported being "coached" to act more like their gender assigned at birth, in order to avoid harassment. McGuire et al. (2010) found that TGNC youth were more likely to hear negative comments by school personnel than to hear personnel admonish other students for making negative comments. In the most recent U.S. national school climate survey, Kosciw et al. (2018) found that 42% of TGNC students had been prevented from using their affirmed name and pronoun, 46% had been prevented from using a bathroom of their affirmed gender, and 44% were required to use the locker room of their gender assigned at birth. Although this shows slight improvement on bathroom and locker room access from the previous iteration of this survey

(Kosciw et al., 2014), TGNC students are still being denied their affirmed name and pronouns at the same frequency.

TGNC students who experience multiple identity-based exclusions are more likely to be exposed to forms of educational inequality that limit their ability to access educational resources, safe spaces and peer support (Daley et al., 2007; Meyer et al., 2016). This exclusion may also occur in LGBTQ groups (Marine & Nicolazzo, 2014), as resources and programming are often more centered on sexual minorities than gender minorities. Wernick et al. (2017) found that TGNC youth of color are more likely to hear transphobic language than respondents who identified as White, while Goldblum et al. (2012) found that TGNC youth of color disproportionately experienced higher levels of gender-based victimization compared to their White peers. Kosciw et al. (2018) also found that Black LGBTQ students were more likely to receive disciplinary actions than their non-Black peers. When putting policy and practice in place, counselors should ensure they are mindful of the additional challenges faced by some gifted TGNC students in order to ensure a positive and supportive school climate for all.

Strategies for Counselors

Counselors working with gifted TGNC young people may find it challenging to navigate the attitudes of colleagues, school administrators, other students, parents/guardians of other students, or even the parents/guardians of the gifted TGNC students themselves. However, if counselors can act as agents of social change in their school, gifted TGNC students can begin to flourish academically, emotionally, and socially.

Before addressing systemic change, counselors should ensure a working knowledge of gender identity, gender expression, and the issues facing TGNC youth (Gonzalez & McNulty, 2010). Counselors can engage with existing literature on the topic (however limited it may be) while also challenging personal biases regarding constructions of gender and stereotypes.

The following strategies are designed to provide a starting point for counselors wishing to better support gifted TGNC students in their school or organization.

Individual Student Empowerment

For many gifted TGNC students, a counselor may be the first person they choose to come out to or speak to about negative school experiences. Kosciw et al. (2018) found that LGBTQ students felt most comfortable talking one-on-one about sexual and gender identity issues with school counselors. Acceptance and

validation of a TGNC youth's identity begins at an interpersonal level, with affirmations of support and encouragement. Students may be unsure how their identity will be received, as many face the additional stress of negative experiences with family or parental rejection (Grossman et al., 2005). For many gifted TGNC youth, speaking to a counselor about their affirmed name and pronouns is the initial step to coming out in a school environment. Counselors can provide opportunities for students to communicate gender identities and affirmed pronouns; however, they should ensure the student does not feel this is required (Sedillo, 2017). Students may have to balance their desire to be seen as their affirmed gender with worries about drawing unwanted or negative attention from peers (Goldberg & Kuvalanka, 2018). Some gifted TGNC students may also adopt an androgynous gender expression while maintaining their name and pronouns assigned at birth (Gonzalez & McNulty, 2010). Supportive counselors can have a significant impact on students' perceptions of safety in school (McGuire et al., 2010; Kosciw et al., 2018) and present a model of acceptance by ensuring that affirmed names and pronouns are respected (Meyer & Leonardi, 2018).

Counselors may choose to communicate their support via the presence of "Safe Space" stickers and posters (available from GLSEN), with prominently displayed rainbow flags (including the trans pride flag), or by actively promoting information and resources for TGNC young people. Counselors can choose to include their own pronouns on student communications and encourage other teachers and school administrators to do the same. By stating gender pronouns, gender binaries that are taken for granted are exposed (McGlashan & Fitzpatrick, 2018), and space is provided for greater discussion of cisnormativity and heteronormativity within the school environment.

Collective Student Empowerment

Counselors can collaborate with gifted TGNC students to foster a climate where students feel safe enough to empower themselves (Gonzalez & McNulty, 2010) by creating forums that build a sense of community (Friedrichs, 2007). Kosciw et al. (2013) found that LGBTQ students attending schools with specific resources (including Gay-Straight Alliances/Gender-Sexuality Alliances [GSA] and supportive educators) were less likely to experience victimization or to have high rates of absenteeism due to safety concerns. The presence of a GSA was consistently the resource most correlated with the outcomes, suggesting that GSAs may provide the greatest benefits to both trans and cisgender queer youth. Although GSAs were previously known exclusively as "Gay-Straight Alliances," there has been a recent shift toward "Gender-Sexuality Alliances" (Poteat, Calzo, Yoshikawa, Miller, et al., 2018). GSAs are typically extracurricular, student-centered (and

sometimes student-led) groups where LGBTQ students, along with LGBTQ ally students, gather for conversation, activities, and mutual support (McGlashan & Fitzpatrick, 2018). GSAs can provide gifted TGNC youth with safe spaces to explore gender identity and expression, discuss issues, develop friendships with other students, gain a sense of community, and engage with activism (Greytak et al., 2013; Hutcheson & Tieso, 2014; McGuire et al., 2010; Poteat, Calzo, & Yoshikawa, 2018; Poteat, Calzo, Yoshikawa, Miller, et al., 2018). In terms of positive development, active engagement within communities can be especially beneficial to young people who face societal oppression, as their efforts may serve to challenge the oppressive systems in place (Russell et al., 2010). Meeting other gifted TGNC students may also provide support around the experience of coming out, as friends and peers can present powerful models of gender possibilities and the potential of what is possible regarding gender expression (Goldberg & Kuvalanka, 2018).

Counselors working with already established GSAs may consider whether the club is currently meeting the needs of TGNC students. GSAs provide an opportunity for students to adopt an activist approach and challenge school policies, including advocating for gender-neutral bathrooms and TGNC representation in curriculum. In their study of GSAs in Massachusetts, Poteat, Calzo, Yoshikawa, Miller, et al. (2018) found that GSAs with transgender members or members with trans friends accessed information and resources on gender diversity more frequently, as well as engaged in advocacy at a higher rate. Counselors can also facilitate collaboration between GSAs and other school clubs (Gonzalez & McNulty, 2010), which will establish a sense of solidarity and further empower TGNC students.

Educating Others

Counselors are in a unique position to effect change within their school and organization, but they may feel restricted by lack of knowledge, lack of clear policy or legal protections for TGNC students, and the attitudes of colleagues, administrators, and the larger school community. However, Peter et al. (2016) found that even modest institutional practices on the part of teachers and school staff can have a positive effect on school climate for LGBTQ students. Identifying common ground can be a strong starting point for counselors, such as discussing students' feelings of safety and how a safe school environment leads to improved academic achievement and decreased absenteeism (Gonzalez & McNulty, 2010). Counselors may then choose to share available data on the effects of identity-based bullying on all students. Meyer et al. (2016) warned against engaging with "pedagogies of exposure," where exposure to (vulnerable) TGNC students is utilized

as the catalyst for institutional change. Counselors can make recommendations and engage with administrative staff in order to create a system whereby a student's affirmed name and gender is added to school documents and registers, a process that can be stressful for students to navigate (Goldberg & Kuvalanka, 2018). Counselors should also consider alternative options within such a system for students with unsupportive parents/guardians, in order to avoid creating an unsafe situation for the TGNC student at home. A student's affirmed name and pronouns can be communicated to other staff members informally, without altering official school records, as often occurs when students use a derivative of their name.

School curricula may contribute to the production of heteronormative and cisnormative discourse through the absence of positive LGBTQ representations, or through the presence of negative LGBTQ representations (Peter et al., 2016). In collaboration with teachers, counselors can ensure that TGNC role models and content are incorporated in school curricula and foster an inclusive learning environment for gifted TGNC students (Sedillo, 2017; Treat, 2017).

Collaboration With External Organizations

In order to effectively advocate on behalf of TGNC students, school counselors should assume the role of leader and ally (Lopez-Baez & Paylo, 2009), which includes dismantling systemic barriers to inclusion and support. Counselors may benefit from gaining background knowledge from a variety of sources and organizations in order to develop a clear argument and communicate it effectively to their peers (Gonzalez & McNulty, 2010). Collaborative relationships with external, relevant organizations (e.g., GLSEN or the National Center for Transgender Equality) can be useful in this respect, as they will often have developed toolkits and workshops that can be utilized by counselors. They may also provide opportunities for guest speakers, mentorships, or internships for gifted TGNC students. Many gifted TGNC students will not have the opportunity to develop role models like themselves, and engaging external organizations in this way can provide a powerful statement of potential to students (McGlashan & Fitzpatrick, 2018). Counselors may also find it useful to connect with national organizations that support families of LGBTQ young people, such as Parents and Friends of Lesbians and Gays (P-FLAG; Sedillo, 2013).

Case Study: Centre for Talented Youth, Ireland

Centre for Talented Youth, Ireland (CTYI), based in Dublin City University, is Ireland's only dedicated program for gifted students. Each year, around 650 students ages 13–17 attend CTYI's postprimary summer enrichment programs. For gifted students, summer enrichment programs like CTYI, with similarly minded individuals, can enhance feelings of acceptance (Coleman & Cross, 1988), increase confidence in peer relationships (Lee et al., 2015), and have a positive impact on academic achievement and socioemotional development (Kim, 2016). Since 2014, CTYI has had a rising number of gifted TGNC students attending the program. In order to support these students, each aspect of the program was considered, from the format of names and gender in the administrative system, to the gendered groups in the residential building. Although some students were open about their TGNC identity when applying (typically those with supportive parents/guardians), many students began coming out while in the program, without parental knowledge. This created a need for a clear system that could balance students' desire to be referred to by their affirmed pronouns and name in the program while all documentation and registers would remain unchanged. One transgender student feared harassment when she arrived and departed campus each day and therefore would change her clothes each morning and evening in the staff toilets. This opened a dialogue about gender-neutral bathrooms and safe spaces for TGNC students.

In order to best support the gifted TGNC students attending the program, CTYI developed a policy, implemented new training, and allocated the duty of Equality Officer to a full-time staff member, ensuring that students, parents, teachers, and residential staff members have a designated person to approach with related questions or issues. CTYI also engaged with LGBTQ organizations in Ireland (e.g., ShoutOut, an LGBTQ organization that offers educational workshops in schools and workplaces), particularly in the area of staff development. Recognizing the value of role models and diversity leadership, CTYI also endeavors to hire a diverse part-time staff team to work with students each summer. By utilizing these strategies, CTYI aims to create a space for gifted TGNC students to flourish, both academically and socially. Feedback has (thus far) been extremely positive from students and staff. In particular, many TGNC students attending the CTYI summer program have spoken about the graduation ceremony and the value of hearing their affirmed name in front of an audience of their peers in a moment of joy and celebration.

Conclusion

Counselors working with gifted TGNC students have a unique opportunity to provide an environment that is safe and supportive, and champions diverse identities. By affirming gifted TGNC students' individual identities, creating collective spaces of support, and educating colleagues and school leaders, counselors may act as agents of social change and empower gifted TGNC students to realize their potential.

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CHAPTER 12

Serving Artistically Gifted Children and Youth

MARY WALKER AND DIANE MONTGOMERY

At 3 years old, Jamaal would draw maps of where he and his family traveled in their small town. With the plethora of art materials in his room, he would represent space, depth, and unusual perception in his replication and artistic representation of perceptual memory of where his family traveled.

Alex had little difficulty in learning the dance steps in the new play for which the director was holding auditions for parts with all eighth-grade students. His father bought recordings so Alex could study the dialect of the main singing and dancing character. Alex wanted to be able to augment the short choreography and melody that were so simple to learn for the audition with an authentic and creative flare.

Seldom do educators, arts professionals, or parents have difficulty in identifying the gifts displayed by students such as Jamaal and Alex. Jamaal not only demonstrates exceptional spatial ability, but also has shown advanced skills in drawing and perception. Alex is committed to advancing his ability to integrate movement, song, and cognitive skills to perform exceptional talent in drama as practiced throughout his short school career. Yet common among these stories are

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some of the major characteristics of talent development for school counselors to recognize. In the lives of these children, there is an indicator of strong parental support (Chua, 2015; Creech, 2010; Piirto, 2007); the children have high motivation—in fact, a burning desire (Winner & Martino, 2003) to learn within their art area; and early expression of the gift made manifest in talent is easily expressed (Haroutounian, 1995). The purpose of this chapter is to communicate the ways that schools in general and school counselors specifically can identify and support talent development for those students who are gifted in the performing or visual arts.

Giftedness and Talent

The identification and nurturing of talent depends on an understanding of its characteristics and how talent may be differentiated but related to giftedness. Often, conventional wisdom is predicated on the idea that intellectual and academic exceptionality represents giftedness, and exceptional ability in other domains must be a talent. However, in another line of thought, talent development is applied to all areas of achievement (Subotnik et al., 2011). The definition and discussion of Subotnik et al. (2011) dictate the educational and environmental needs for nurturing potential to express eminence. Olszewski-Kubilius et al. (2015) offered the importance of the contextual development of talent to counselors. This renewed emphasis on talent development in any domain (Robinson, 2012; Worrell et al., 2019) facilitates student identification and growth in arts areas. Simply put, "gifted students are those who are exhibiting superior performance in a particular domain relative to peers" (Worrell et al., 2019, p. 552).

Throughout this discussion, giftedness represents the potential to achieve above-average competency in an art area, whereas talent is the development of the gift to fulfill potential. As discussed by Gagné (2018), talent is a product of an interaction between aptitudes and intrapersonal and environmental catalysts. Piirto (2007) clarified the broad range of fields for talent as spanning domains in the academic, interpersonal, athletic, or artistic areas with giftedness defined as the aptitude for achievement in these fields. Gagné (see Chapter 1 in this volume) further suggested that the gifts are the building blocks required to develop a skill within a particular talent field. Therefore, exceptional talent cannot exist without the necessary materials or gifts required to build a skill.

Passion for the arts may be visible to the classroom teacher or the school counselor. The school counselor has the unique position of having a potential personal relationship with each child in the school. There are several things that can be done to identify the gift of potential talent and seek the appropriate outlets for

development of the talent. There are realistic actions for counselors: (a) informally seek to structure the classroom or school context by which giftedness in the arts may be identified, (b) formally advocate for program options to meet the needs of students gifted in the arts, and (c) utilize the arts to meet psychological needs of students (Groman, 2019).

Changing Times

Two major changes have allowed the evolution of the role and thinking of school counselors for talent development in the arts. One has been a gradual evolution and the other an abrupt change in educational delivery, format, and content. The gradual movement benefiting the arts is the inclusion of the arts in the national push for science, technology, engineering, and math education, moving from STEM to STEAM. The other change is the radical demand on school counselors with the advent of the pandemic of COVID-19.

STEAM

There is a major emphasis in the United States on the field of STEM (science, technology, engineering, and mathematics) in schools. Although STEM study is applicable to all ages of students, a lack of interest and motivation in learning may begin early due to the education system's tendency to focus on tasks while rarely implementing self-motivation through curiosity (Land, 2013). This emphasis on memorization or application of one skill, rather than true investigation and problem solving through exploration of multiple avenues, neglects creativity. Additionally, younger students, as early as kindergarten, are often expected to sit quietly and focus on math or reading, instead of engaging in the great amount of play and artistic expression required for them to develop other skills, including socioemotional development, cognitive development, and social equity (Brouillette, 2009).

The application of STEAM (science, technology, engineering, arts, and mathematics) in classrooms takes on a variety of formats (Land, 2013). Adding an artistic component to any lesson can enhance the curiosity and skill of all students, and also ensures a necessary learning outlet for students who are artistically gifted. Building a clay model of the parts of a cell rather than just naming them, drawing or coloring a workflow chart when discussing a process, or using music and rhythm to deal with mathematical concepts can all add to the curiosity components and artistic expression of students.

Considerations for school counselors in the implementation of STEAM programs include outlining the program in detail to teachers and arranging proper training for teachers and stakeholders on expected results of such campaigns and how to implement these multifaceted lessons in the classroom. Which teachers are selected to integrate STEAM activities will also make a difference in the success of the campaign, as having teachers collaborate with other enthusiastic teachers will pose fewer challenges during implementation (Herro et al., 2017). A poorly implemented program, including lack of training, poor understanding of program goals, and unclear expectations of how to prepare integrative lessons, will lead to frustration for teachers and other administrative personnel. By working hard to implement a strong, informed team of staff and faculty to back a STEAM program in a school or district, school counselors see growth of artistic academic endeavors in their schools.

The COVID-19 Pandemic

The years 2020 and 2021 brought such drama to the United States with the COVID-19 pandemic. Communities shut down, and schools, daycare centers, and universities were closed (Daniel, 2020). This changed the way educators achieved learning goals within their work, and the ways that school counselors supported children, youth, and families. Yet school counselors along with other educators and support personnel were active, using videoconference platforms to provide small-group and individual programs to students at all levels (Yorio, 2020).

The abundance of opportunities for those families with Internet access changed the ways that the arts were available. Videoconferencing and Internet access were essential to entertainment, creative expression, and skill development in the arts. Libraries gave online access to books. Art museums provided free lectures on particular works of artists, developed art lessons for various ages and skills, and conducted tours of special collections. Ballet and dance companies advertised performances, and music schools and conservatories offered online lessons (often free of charge). These radical changes to the way families experienced the arts may influence school and community thinking about the value, necessity, and obligations for access to the arts.

Expressions of Talent

Talent can be expressed in infinite ways. For artistically gifted children, art, music, drama, and dance provide the outlet for expression of giftedness through tal-

ent. Although there are cultural differences among views of talent, such as Eastern talent training versus Western talent development, characteristics of talent emerge in children at very young ages. For an example of cultural influences, compare the system of Russian music education to Chinese talent training. Russian music education allows students to play an active role in their musical education. Students are encouraged and expected to make decisions, design the works performed, and control the plan to improve performances, which leads to more creativity in and outside of music performance (Klimai, 2010). On the other hand, gifted Chinese children are exposed to an acceleration approach, as opposed to a multifaceted approach, where the focus is on exposure to more advanced concepts or fields of study earlier or in a shorter amount of time (Zhang, 2017). Music education for Chinese children is more prescribed, lacking the creative nature that is apparent in Russian music education. Although the ways in which students express talent may vary by culture, common characteristics emerge in young gifted students. Table 12.1 provides general guidance in the discovery of gifts and talents starting at young ages.

Evidence for talent in the visual arts is often indicated by high scores on spatial portions of ability tests (Lubinski, 2010; Piirto, 2007). When students have spatial ability, they develop skills in imagery. Children talented in the visual arts see the world in terms of shapes and visual surface features, rather than in terms of concepts, which allows their art to appear more realistic compared to other students' work (Winner & Martino, 2003). Self-concept is often higher in children with visual arts talent, coupled with fewer feelings of inferiority documented in several studies (Cukierkorn, 2008). Children with visual arts talent can be identified through their intense dedication and interest in a specific media (Clark & Zimmerman, 1987). Other characteristics include precocity, concentration ability, fluency, communication, and individualized working schedules, which can be further developed through appropriate programming. Individualized working schedules occur when students have their own scheduled time in labs, studios, art galleries, private lessons, or auditions. These opportunities accelerate the development of talent in any of the arts areas.

Musical talent may emerge by the preschool age, is observable as a physical trait (e.g., playing instruments, constructing movement to music, singing), and connects to intense intellectual interest (Richardson, 1990). Process or performance assessment using musicians or music educators is one method that can be used to recognize the musical talents of children, especially in children from families with low-income backgrounds (Piirto, 2007). Performance assessment will not rely on prior musical training or production of practiced music. Oreck (2005) had a specific strategy to train teachers and artists to work together to identify talent in music (as well as in dance and theater).

Table 12.1
Evidence of Talent

Visual Arts	• Interest emerging through drawing • Precocious development through drawing stages • Intense concentration ability • Individualized working schedules • Discovering comfort through drawing • Abundance of ideas • Communicating through drawing
Music	• Spontaneous response to rhythm and music • Unusually high interest in music activities • Love for singing • Indicators of absolute pitch and/or tone • Ability to identify a familiar song based on rhythm alone • Ability to match pitch • Memory of music heard • Desire for music lessons • Ability to identify two melodies as the same or different • Concentration on music • Auditory ability
Drama	• Ability to improvise/shift immediately into new roles • Interest in dramatic activities • Happiness stems from play-acting • Ability to evoke emotional responses from listeners • Ability to use inflection in one's voice • Imitates others • High ability to dramatize feelings and experiences • Writes original plays or bases them on stories
Dance	• Preference to learn in concrete ways • Fidgety when asked to sit still • Bored with nonphysical concentration • Constant movement • High determination and will • Discipline to practice and succeed

Students talented in drama exhibit spatial, bodily-kinesthetic, musical, and interpersonal intelligences (Groff, 2013). Movement is important to these students. Intrapersonal intelligence is a key aspect to drama, as this is how actors interpret the world through their bodily actions (Piirto, 2007). A key approach with students talented in drama is the holistic connection between the body, mind, and soul. Although curricula are often separated into cognitive, affective, or psychomotor aspects, the attempt to reconnect these aspects will better serve

drama students. Table 12.1 indicates characteristics to consider when discovering and designing programs for drama students.

Dance is kinesthetic, pulling students into a journey through movement and adventure. A key aspect to dancing is that a dancer uses gestures, extension, and physical being to deliver the message of the dance (Piirto, 2007). Dance talent can be recognized at an early age through body type, strength, and determination. Students with this talent want to move and express themselves through their movement (see Table 12.1).

Although it is important for children to have support in their areas of talent at an early age, personality characteristics may enhance these talents. Highly talented students may require more flexibility in learning. They may be noticeably assertive, imaginative, and intuitive (see Chapter 4 by Piechowski and Wells, this volume). Individualized education programs to enhance these talents provide opportunities to demonstrate characteristics and abilities while talents are strengthened.

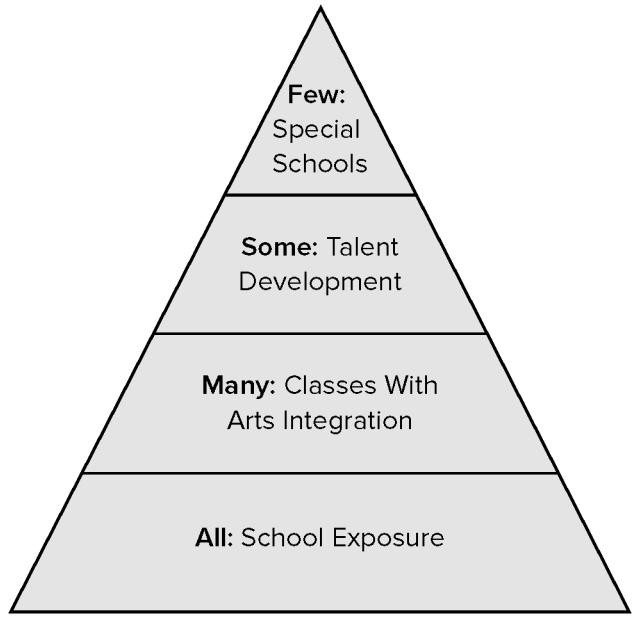
Emergent Talent Model

Often conceptualized as a pyramid of program options (see Figure 12.1), the Emergent Talent Model discussed here was employed for the research conducted in Project CREATES (Connecting Community Resources Encouraging All Teachers to Educate With Spirit; Montgomery et al., 2007). The model, which has continued beyond the research, directed the program services to facilitate talent development in music, art, movement, and drama. Activities at each level assisted in the identification of students with interest or talent in the arts to move to the next higher level of services. There were fewer students participating at the high levels of service and identification.

Arts Exposure for All Students

Exposure for all students takes place at the school level. When the arts are infused into curriculum for all children, two important and relevant results occur. Learning is enhanced for all students (Gullatt, 2008), and the identification of students who need advanced study or talent development becomes evident in the authentic environment of the classroom. In order to create an environment for gifts in an arts area to be recognized, opportunities for the expression of interest, motivation, and passion must be offered throughout the school. Hopefully, the school counselor has connections in the community to invite student performances, quartets, and even puppet shows that can occur during school assemblies or public times at the school. Galleries of others' work can be established in the

Figure 12.1 *Emergent Talent Model*



common areas or halls to highlight the art values of the school and increase student exposure to the arts. Often a certain number of free tickets to community events are available to schools. Equitable means of distributing exposure to the events can be promoted by school leaders.

There are several benefits for students with arts involvement at the school level. The arts reach students who are not otherwise reached, connect students to themselves and to others, transform the learning environment, and provide new challenges and new learning opportunities (Zemelman et al., 2005). Throughout several studies conducted regarding arts integration in schools, arts experiences leveled the playing field for students from ethnic-racial minorities and those receiving special education services. In the schools studied, the arts were not treated as extracurricular, but as a mode of curriculum (Zemelman et al., 2005). Arts exposure is a good tool to engage students and to begin to motivate teachers to integrate the arts into their curriculum.

Arts Integration for Many Students

Although arts integration takes place at the teacher level, not all teachers feel comfortable integrating the arts into all curricula (Oreck, 2004). Therefore, the

decision to integrate the arts rests with the teacher of the general classroom (in elementary grades) or specific content area (in middle, junior, or high school). Transforming school culture to embrace the arts occurs in an authentic and motivating manner, rather than a mandatory "buy-in" requirement for schools to participate. Teachers in Project CREATES were motivated by professional development sessions for new techniques in arts infusion, coupled with involving artists to coteach lessons in the curriculum. Other teachers could now step out of their comfort zones and get involved (Van Eman et al., 2009). Eventually, with the support of school leaders, schools reach a critical mass of teachers using the arts in all areas.

Smutny (2010) offered ways and reasons that arts should be incorporated into regular classrooms. Introduction to art pieces and stories may invoke insight about a character, video projects raise questions on how to find information, and music can help develop mathematical skills in the forms of patterns and structures. The learning promoted through these activities is an extension of natural classroom learning. Creativity and the arts provide a way for students to come alive in learning, thus creating a more authentic learning experience. Thinking skills, perception, imagination, problem solving, personal expression, and visual reasoning are all skills that are enhanced through education using arts.

Talent Development for Some Students

As students find their passion (Fredricks et al., 2010) in an art area by the exposure to productions at the school level or the activities and learning outcomes in their classes, interests and strengths will "bubble up" and be expressed in formal or informal ways to teachers and school counselors. These students often move at faster paces than a typical school schedule will allow, thus requiring more opportunities for individualized talent development (Haroutounian, 2017). Resources for small-group talent development might be generated by parent groups or the arts educators at the school. One example is to utilize the strengths of the arts educators for specialized lessons (e.g., oils, charcoal, other media), honors groups (e.g., band, jazz, plays), or physical education special courses (e.g., dance, yoga, ballet). The focus at an educational level will be to diagnose the needs of gifted learners and provide them with the context to develop and use their talents fully. After talents have been developed, nurturing of those talents will propel students into achievement within certain domains. Developed and nurtured talents will be demonstrated throughout their life's work.

Special Schools and Lessons for Few Students

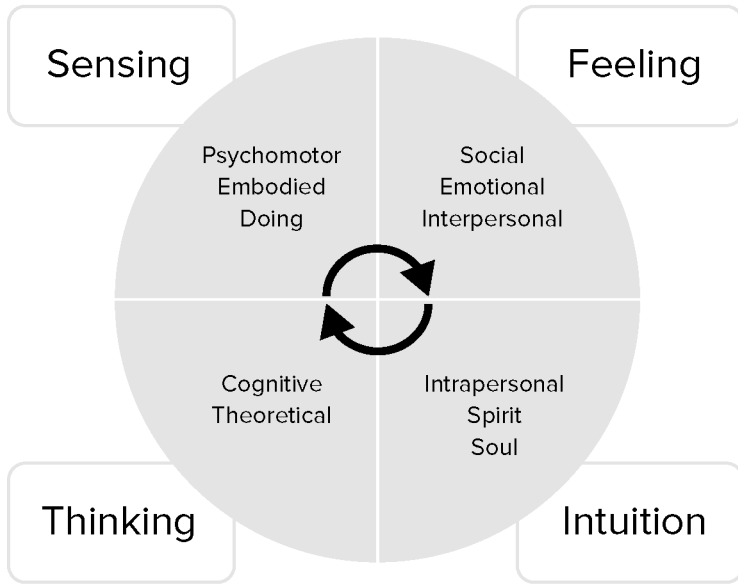
Talent development in the school could likely be the context for identification of students who need additional services. School-based honors band, choirs, and theater or dance troupes may lead to specific opportunities in the community for specialized small-group or individual lessons in an arts area or production. School counselors or other school leaders/advocates might connect with community resources to identify the community outreach programs. For example, ballet companies, symphony or orchestra groups, choirs, or fine art galleries often offer free lessons to children and youth gifted in the arts. Smaller cities may have churches or dance teachers to entertain the idea of community outreach or lessons on a sliding scale of payment for students who show promise in the arts area.

Holistic Arts Education

School counselors appreciate the need to nurture the social, emotional, and psychological needs of children and youth. Nurturing creativity in all talent areas cultivates all developmental areas of learners, and it appears natural to view creativity and skill development in the art areas as having the potential to integrate the mind, heart, body, and soul. This holistic approach to talent development is essential for gifted learners who express themselves emotionally, aesthetically, and cognitively (see Figure 12.2).

Integrating the developmental components and needs of a learner, as opposed to integrating the art areas, is a unique combination of the Jungian psychological view of personality, the Native American medicine wheel for holistic health, and holistic education (Montgomery, 2014). Project CREATES promoted the planning of arts-infused lessons with the emphasis of each of the Jungian (Singer, 1972) psychological functions of sensing, intuition, thinking, and feeling. To facilitate planning, the lesson sections were labeled for thinking, feeling, doing, and creating activities from the view of the learner. Planning for the cognitive needs incorporates standards in at least two content areas—one in the arts and the other(s) in science, math, social studies, or language arts. Teachers and artists work together to collaboratively plan, implement, and evaluate lessons, resulting in greater sense of wonder and creativity. Creative products are abundant in classrooms as children practice artistic skills in visual arts, music, or movement. Such lessons theoretically integrate cognitive learning in two content areas with intuitive creating and a mind-body connection of expressing oneself in the art area. Authentic peer feedback in social groups facilitates the social and emotional needs of learners.

Figure 12.2 *Holistic Arts Educational Planning*



Talent Development Program Options

The program development tools recommended here match the levels in the Emergent Talent Model and aid in the process of designing programs to serve the identified talents of gifted students.

Professional Development for Teachers in Identifying Characteristics

School counselors serve a pivotal role in initiating programs to meet the needs of students with artistic talents. We recommend formal and informal strategies to enrich and sustain this collaboration of counselors serving as catalysts for teachers. Formal professional development can be arranged with community artists, arts educators, and teachers to identify the characteristics of students with the potential for demonstrated talent. Then, counselors follow through with meeting individual needs of these identified students through appropriate program options. Counselors can:

- work with teachers to identify characteristics of talents in gifted students (see Table 12.1),

- create opportunities for teachers to discuss these characteristics and their manifestations with each other, and
- develop characteristics standards that may be useful in providing a systematic way to notate these characteristics among students and can even be broken down by specific talent area (e.g., visual arts, music, movement) and age group.

Connections With Professionals for Characteristic Identification

The school counselor provides a link to community artists who are well-versed in the characteristics for the identification of talent. Their support can improve identification processes throughout schools and districts. Counselors can:

- seek out professionals in their community who may be willing to help with characteristic identification, including musicians, artists, dancers, and actors; and
- allow and encourage professionals to work closely with teachers in identification of talent characteristics and to share personal experiences about their own talent discovery, which will also help teachers understand the identification process in a different context.

Community Search for Resources

Community support plays a vital role in the success of an arts program in the school. By getting the community involved in the initiation of a program, counselors will be assuring that the life of the program is extended. We recommend that counselors initiate a school- and community-based task force or committee to assist with the work involved in securing resources to meet the identified needs of talented students. Besides financial support, community members and resources help students by providing them with outreach programs and sometimes even free lessons in specialized arts areas. Counselors can:

- find resources in the community that may have an interest in sustaining an arts program at their school;
- encourage donations and fundraising across their community;
- seek out partner organizations, such as a performing arts center, to enhance what may be offered to students through programs; and
- invite community members to attend public meetings to learn about the needs of students and how these needs can be met through program design.

Tailored Program Development to Meet Student Needs

When developing talent among elementary-age children, guidelines must be followed according to students' interest, physical coordination, and capability to perform in the arts areas, such as ability to play an instrument, ability to draw with perspective, sensory and physical awareness, and intent to practice. By waiting for these areas to develop, rather than pushing a student, anxiety and disinterest toward the arts area may be avoided. Counselors can:

- encourage teachers to invite artists to infuse the arts into curriculum, providing the context for observations;
- specify individual needs of students and strategize how needs can be met (e.g., access to musical instruments, drawing tables, stage arrangements, or other materials and equipment; availability of practice sites and studios; or supervision);
- plan for materials and resources required to meet specified needs;
- create benchmarks for characteristics standards previously set, and base these on the specific talent;
- determine how to measure these benchmarks among students, and specify techniques that can be used to help students reach the benchmarks; and
- integrate programs into other academic and home areas of learning.

Invite Artists to Assist With Program Evaluation

To assure successful implementation of school programs, counselors are invested in managing the evaluation of the efforts or program options employed. We recommend that artists and professionals partner to provide a fresh outlook on program outcomes. Allow them to incorporate current trends in their field of expertise to help evaluate programs and make suggestions for improvement (Oreck et al., 2003). This evaluation process extends the sustainability of arts programs. Counselors can:

- use experts in each field to measure program outcomes,
- allow expert and student interviews to determine what needs have been met through the program, and
- review future goals for individual students, including parental input.

Summary

Students who are talented in the arts typically demonstrate passion for the domain. Personality characteristics may be evident in addition to expressing pas-

sion for the art content in writing and speaking. Counselors may often be the ones to initiate the identification and programming to transform schools as teachers and community members develop the talents of children and youth. Counselors will reap the rewards from their investment of time in making the accommodations to encourage talent development. These rewards include encouraging learners to love school, moving learners from novice interest to specialized talent (Clark & Zimmerman, 1987), and celebrating creativity in the school culture.

Resources

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CHAPTER 13

Counseling for Young Children

NANCY B. HERTZOG

> I've never seen so many babies with anxiety, so many BABIES with anxiety! I'm like I'm grown, and my children see me deal with it. They even know that [I have] depression and anxiety and I'm very honest with the way that it shows up in having conversations with them about it, and now I'm having to like tend to theirs as well, and how do I do that and you want me to talk about the fact that they're smart? Like I don't have time for that! (Hertzog et al. 2020, focus group interview, November 23, 2019)

Since the first edition of this book and the inclusion of the original chapter, much has happened in the world, and young children have been deeply impacted. The United States has witnessed a global pandemic, the Black Lives Matter movement and racial unrest in the country, and increased numbers of people suffering the reality of natural disasters, including ravaging forest fires and hurricanes. As a national survey about the well-being of parents and children indicated, "Parents and children have been substantially affected by the COVID-19 pandemic. More than 1 in 4 parents reported worsening mental health, and 1 in 7 parents reported worsening behavioral health for their children since the pandemic began" (Patrick et al., 2020).

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The lives of children and families have drastically changed, validating Bronfenbrenner's (1994) ecological model that microsystems (family, school) and macrosystems (social and cultural contexts) influence their development. Recently, more families are stressed. The loss of jobs, loss of daycare, and loss of traditional schooling have all impacted the mental health of parents and children. The impact of these current events and circumstances has not been the same for everyone. Specific populations have suffered more and have increased risk of mental health problems, regardless of age. In today's context, the impact of stress on families requires a more urgent call for counselors to take the lead in helping young children, especially young children of color, grow healthy identities as highly capable scholars.

In the previous edition of this book, I focused mainly on the family unit and how most needs for counseling of young children started with parents' questions related to behaviors and giftedness. In this chapter, I encourage proactive intervention to promote mental health in young children, and articulate social and emotional behaviors that should be taught explicitly in educational settings and supported by school counselors. I acknowledge that the first version of this chapter did not note differences in racial identities as they pertained to mental health care. I focus now on counseling needs for young children who may be identified or should be identified to qualify for gifted education through an equity lens. I will make three key and related issues explicit:

1. There are socioeconomic and racial disparities in the U.S. health system that directly impact the mental health of young children.
2. Institutional and structural racism impacts gifted education programs and may result in mentally unhealthy educational placements for young children of color and their families.
3. The COVID-19 pandemic exacerbated educational inequities, and remote learning has not benefitted all young children equally. These educational inequities contribute to a more urgent need to address mental health problems in school as well as home settings.

No one disputes that there are grave inequities in access to healthcare. White families with more economic resources have greater access to healthcare and have fewer risk factors associated with poor health. According to a summary report on stress and health disparities:

> Children raised in African American, Hispanic, and American Indian populations are more likely to live in homes with higher unemployment and lower incomes than white children. This means that they are less likely to have good housing, good nutri-

> tion, good access to health care, and access to good education. Such disparities increase their risk of health problems and of receiving less, and lower-quality, education. Even when minority children live in wealthier areas, research shows that they are often treated differently by teachers. They are more likely to be harshly punished for minor infractions, less likely to be identified as needing special education, and teachers may underestimate their abilities. And when a teacher doesn't believe in you, you are less likely to believe in yourself. (McCarthy, 2019, para. 6)

This quotation illuminates two issues that impact mental health in young children: structural racism that is inherent in schools, particularly in the structure of gifted education programs, and inequities in access to healthcare.

Structural Racism

In a recent partnership with a nonprofit organization, I interviewed focus groups of families of color to find out about the barriers they faced in accessing gifted education and other advanced learning opportunities in their communities (Hertzog et al., 2020). A major theme that permeated the interviews was the perception of implicit bias teachers held about their students of color. A second theme was the amount of stress and anxiety families felt was caused by these biases, microaggressions, and other feelings of not belonging to classroom communities of high-achieving students. Participants referred to placements in gifted programs as "White spaces." To lower the anxiety of young children, educators must not only attend to the child and the family, but also alter the educational environments children of color find in classes and schools, particularly in settings for high academic achievement. Therefore, counselors are tasked not only with helping children and their families, but also with advising teachers and administrators on how to promote and create "identity safe classrooms" (Steele & Cohn-Vargas, 2013).

Research clearly shows that whether a teacher "believes in" their student affects how well that student does in school, regardless of the student's abilities. Educators should be aware that teachers' expectations can be influenced by their own implicit biases (Washington Office of Superintendent of Public Instruction, 2020, p. 5). Thus, it is important to start with explicit instruction for teachers in two areas. First, teachers need to be made more aware of how their implicit biases may impact their perceptions and expectations of their students, and how

their classroom environment alters and impacts achievement. Secondly, teachers can be taught how to integrate explicit teaching of social and emotional skills into their curriculum and instruction. The Washington Office of Superintendent of Public Instruction's (OSPI, 2020) Social and Emotional Learning Standards guide the explicit instruction of social and emotional development in the state's public schools. Standards articulate six areas: self-awareness, self-management, self-efficacy, social awareness, social management, and social engagement.

Teachers need to understand that the learning environment (just like the home environment) can cause their students to be more or less stressed, feel more or less capable, assume more or less control of their own actions, or see themselves as more or less in control of their own emotions. Therefore, it is important for counselors to play a role in contributing to the teaching of social and emotional skills in schools. Counselors need to be knowledgeable about the issues and practices surrounding gifted education in public schools. As advocates, counselors may play a role to help all families, especially families of color, access gifted education programs, understand their children's challenging behaviors, and support their children's prosocial and emotional development.

Accessing Gifted Education Programs: Is My Child Gifted?

For many parents, when their 2-year-old starts reciting the alphabet, gives them directions to turn left, or reads the prices on shoeboxes, it is cause for shock. They begin to notice other 2-year-olds and experiment with finding out what their child knows and is able to do. If their child is in day care or early educational environments (preschool), parents start comparing their child to all of the others and begin to question, "Is my child gifted?" They often turn to their teachers—who truly do not know the answer to their question or are skeptical that they may need to do more to please these parents. Unfortunately, by the time parents seek counseling to answer this question, they have often become frustrated. They want a simple answer, and the answer is never simple. Counselors should know that there are many complexities to the question, "Is my child gifted?" Parents may just want a counselor or a psychologist to give their child an intelligence test. This may arm families with a score that they can use to show school personnel or childcare providers that their child is highly intelligent and generally able to do more than what is currently being provided to the child.

Counselors should help parents and families reframe this question. Especially for young children, giftedness or being labeled gifted should not depend on a score from an IQ test or any other test of cognitive ability. Counselors need to

understand the historical and elitist contexts of IQ tests, and why it may be harmful to use them to label young children gifted. Cole (1985) argued that there is no such thing as a "cultural free" intelligence test. Inherently, standardized measures of cognitive ability are culturally biased. Coleman and Cross (2005) summarized the complexity of defining giftedness:

> The disagreement about what constitutes giftedness has led to an almost bewildering array of proposals on how to define giftedness. These definitions are probably a consequence of the values of the person making the proposal, the social climate of the time, and the gradual changes in our knowledge about human abilities. (p. 5)

Johnsen (2018) edited a detailed practical guide to identifying giftedness for personnel who are serving students in school settings. Although definitions vary greatly across school settings, the data used to identify and label students as gifted most often include a variety of sources: standardized testing, behavior checklists, observational anecdotal information, performance, or other products of demonstrated skills and abilities. Young children, however, are not always in school settings, and they do not always provide reliable data.

Experts warn against using standardized tests for inclusion or exclusion of students in programs, including kindergarten. The National Association for the Education of Young Children (NAEYC, 2003), in a position paper on assessments, provided many reasons why the results of testing young children may be unreliable. These reasons include the variability of behavior in young children, the anxiety many young children have when faced with unfamiliar situations, difficulties with language due to culture, and the inability of young children to clearly demonstrate what they know.

In addition, there is concern that advanced academic development at a very young age is highly related to opportunities and experiences for language development. These opportunities for academic development should be considered through an equity lens. Children with more opportunities to gain vocabulary and language perform higher than those from families whose first language is not English or those from low-income homes. Poverty has a direct and correlated impact on intelligence and literacy scores (Duke, 2000; Neuman & Celano, 2006). Also, children for whom English is a second language tend to score lower on standardized tests than their peers who speak English as a first language.

A position statement from NAEYC (2019), *Advancing Equity in Early Childhood Education*, cautions educators about the limitations of research based on a "normative perspective of White middle-class children without disabilities

educated in predominately English-language schools" (p. 6). The position statement stresses that educators should not take a deficit approach to teaching children of color or children whose first language is not English. Instead, all instruction, especially for young children should be based on their strengths.

Although testing a child's intelligence may inform parents about the strengths and weaknesses of their child's development as measured on an intelligence test, it does not define whether or not the child is gifted. In fact, there are alternative paradigms that refute the view that children are born gifted. Dai and Chen (2013) articulated three paradigms of gifted education: the Gifted Child Paradigm, the Talent Development Paradigm, and the Differentiation Paradigm. In the Gifted Child Paradigm, the child is labeled gifted by scoring in the top 1%–5% on a standardized intelligence test. The use of IQ tests to determine giftedness, and other practices that use measures of cognitive ability to determine placement in gifted education, adheres to the paradigm that giftedness is innate, stagnant, and measurable. Educators adhering to the Talent Development Paradigm take a developmental approach and believe that giftedness and talent can be nurtured and developed. In the Differentiation Paradigm, the focus is on curriculum and instruction that matches students' educational needs. In this approach, giftedness is not measured by being in the "top" 1%–5% of the population on the distribution of a bell curve. Rather, matching students' learning needs with the pedagogy and curriculum that challenges them provides an opportunity for gifted education to be accessible to children who have advanced learning needs regardless of their scores on standardized measures of cognitive ability.

Parents, counselors, psychologists, teachers, administrators, and policymakers have traditionally taken the psychological view of giftedness from the Gifted Child Paradigm (Dai & Chen, 2013), and have relied on measures of cognitive ability and intelligence tests to provide the "gifted diagnosis" and access to gifted programs. This approach distinguishes between gifted and nongifted and separates children according to their measured mental acuity. With tests being biased, this system is the most explicit form of structural racism in schools, and this practice is being radically altered across the country in response to the underrepresentation of children of color in gifted education programs.

It is important for counselors to understand broader views and conceptions about giftedness and inequities that are caused by the overreliance on test scores for entrance into gifted programs. For all families, and especially for families of color, counselors may need to advocate for placement into gifted programs based on the strengths students have that may not be measured on standardized tests. Counselors in schools may need to help parents access gifted programs. In interviews with families of color (Hertzog et al., 2020), a consistent theme of those interviewed was that they felt the system of placing children in gifted programs

did not work for them. Either parents felt that their children were overlooked by teachers, or they felt that even once identified, gifted education was not the appropriate environment for their children. Many parents of color noted that school testing for young children can be problematic. One parent stated her frustration with the system for testing kindergarten children:

> A five-year-old, brand new, never been to a school, got taken to a big cafeteria and they're like okay, we're going to walk your kids down the hall; he ain't going to go with you; he don't know who you are! They wouldn't let us walk him, so he was crying and it's like we had to persuade him to go and we walked him down the hall out the door and then forty minutes later he finally went in. So then he missed twenty minutes of that test. Of course he ain't going to pass, right! So, we had to go back the next year again and he finally did. (Hertzog et al., 2020)

Even if schools use standardized measures of achievement to select children for gifted programs, the group selected for the gifted program is not homogeneous. Webb et al. (2007) understood the variance in children even with similar abilities as measured by tests of cognitive ability:

> One cannot assume that children with similar IQ scores have similar personalities, interests, abilities, or temperaments. Gifted children often have substantial variations in abilities within themselves and develop unevenly across various skill areas. (p. 7)

This unevenness in development, called asynchronous development, is especially true for young children. For example, children may read at age 4 but might not be able to hold a pencil and write their thoughts about what they read, even though they can speak them with an enormous amount of complexity and sophistication. This advanced ability to conceptualize their ideas without the ability to implement them may indeed be cause for frustration—both in the children and in their families. Understanding how young children grow and develop unevenly is important for all parents, but particularly important for parents whose children show signs of advanced development in some areas and not others. Parents and teachers should not conclude that children who are advanced academically but display age-appropriate social and fine motor skills have deficits and are in dire need of help. Rather, parents and teachers will want to formulate age-appropriate expectations for children regardless of whether or not they have been identified for gifted education services.

Webb et al. (2007) suggested that "because asynchronous development is prominent in so many gifted children, some professionals believe asynchronous development, rather than potential or ability is the defining characteristic of giftedness" (p. 7). Because parents are often referred to as "the child's first teacher" (Goals 2000: Educate America Act, 1994), it becomes critical to educate parents about ways in which their children grow and learn. Mendoza et al. (2003) stated the importance of parenting: "parents or other primary caregivers usually provide the child's first experiences with language, numeracy, social interaction, and problem solving, which help to build the child's foundation of skills and knowledge that he or she will need for school" (p. 11).

Impact of the Gifted Label on Family

In order for students to access gifted education services, most states have laws or policies that require assigning a gifted label to students. Labeling young children gifted as a result of scoring high on any test of cognitive ability could produce more harm than good. Labeling would in fact place expectations on the child that may have unintended consequences later on. Dweck (2000) cautioned parents not to emphasize the entity view of intelligence, which is fixed and stable. Rather, she proposed that children should understand intelligence from an incremental view—malleable and changeable as a result of learning experiences. Current information on how the brain grows and develops supports this incremental theory of intelligence. In addition, labeling a young child gifted may influence families to react to that label. Whether families need counseling because their child is gifted or because the label compels them to seek counseling becomes a circular argument. Colangelo (1997) discussed the need for school counseling once a child is labeled:

> School counselors should anticipate difficulties in families when a child is first labeled gifted. Second, counselors should help families anticipate changes as they attempt to adjust to the label. For siblings, the gifted label throws into question their role and their importance in the family. (p. 358)

Previous research has shown that when the family is centered on one child, there is concern for other siblings. Cornell (1984) summarized his research on the influence of being gifted on the families by stating, "The family may come to define itself primarily through its concern with fostering and encouraging the child's abilities" (p. 105). As a result of the label, families may center their attention on providing opportunities to stimulate the gifted child.

This intense focus on the child may change the family dynamics and relationships. Parents do not always agree on the label attached to their child. According to Cornell's (1984) research, some parents felt that being gifted was not a desirable label because it was associated with some "form of social or emotional maladjustment" (p. 94). Mothers and fathers often had different definitions of giftedness and felt differently about the way their gifted children should have power in the family. Cornell also noted that parents' relationships with the gifted child's siblings seemed less favorable than the parents' relationship with the gifted child, and suggested, "Further research should examine the particular problems and difficulties in their psychological growth and development" (p. 106). In particular, families of color may wish to avoid labels of giftedness because they associate the label with elitism and White privilege, as exemplified by this parent from the focus group study (Hertzog et al., 2020):

> I feel like there is so much stress already placed on academics and this sense that [my child] needs to because she's a minority or if she is with other children that that's the focus; it seems kind of very White-centric this idea of achievement and needing to prove themselves or to set themselves above other kids or categorize themselves somehow.

The message to counselors, therefore, is that being labeled gifted or participating in gifted programs does not just impact the child. Counselors should be keyed into issues that families face if changes are made in schools or educational opportunities because of the gifted placement. Giving support to the parents may include interventions that support the whole family.

A number of parent guides for gifted children have been published (e.g., Webb et al., 2007), but very little information exists about when it may become necessary to seek counseling. It is interesting to note that Webb et al. (2007) suggested introducing young gifted children to counseling early so that "you increase the likelihood that your child will seek support and assistance when needed as an older child or adult" (p. 317). Although the authors made an implicit assumption that because children are gifted, they will need counseling later, research has not shown any significant relationship between giftedness and social adjustment (Neihart et al., 2016; VanTassel-Baska, 1998).

Parents should not use the gifted label to justify or rationalize inappropriate behavior from their young child. By labeling their children difficult, stubborn, or lonely, they are setting themselves up for self-fulfilling prophecies.

Very few researchers have focused on preschoolers in the field of gifted education because so few gifted programs include preschoolers. The typical problems

of preschoolers who show advanced academic development noted by Karnes and Johnson (1991), although dated, may still be relevant:

- Gifted children may grow to dislike school and develop a negative attitude toward learning if they are expected to conform, are restrained from learning what they want to learn or are unable to pursue their interests.
- Gifted children may become frustrated when a discrepancy in growth interferes with reaching goals they set for themselves.
- Boredom may develop if they are not challenged or are required to learn what they already know.
- Sometimes children with behavior problems are not being challenged. When the classroom becomes challenging, their behavior may become acceptable.
- Lack of identification and appropriate programming may result in a pattern of underachievement that will be difficult to reverse as the child becomes older.
- Children of lesser ability may reject gifted children because their advanced vocabulary and greater knowledge may make other children feel inferior.
- Gifted children may not enjoy the same games as their less able peers. (p. 184)

Mahoney (1994) noted that counselors must make accurate assessments of a child's learning problem to avoid labeling students with a disability or a disorder (e.g., Attention Deficit/Hyperactivity Disorder, obsessive-compulsive disorder, anxiety disorder) that may have similar behaviors to what may be found in young children with highly advanced academic abilities. If parents suspect that one of these disorders is present, they should seek appropriate medical advice. With or without an identified disorder, parents may seek family counseling to break patterns of behaviors that impact the child's social relationships or the child's feelings of self-efficacy and self-confidence. Katz and McClellan (1997) noted:

> The long-range, persistent effects of early social difficulties may be understood as a recursive cycle. In a recursive cycle, individuals' patterns of social behavior tend to elicit responses from others that in turn elicit more of that behavior and ultimately strengthen it. The cycles may be either positive or negative. (p. 56)

For young children of color, their behaviors may be misinterpreted by their teachers or other adults in early care settings. As one parent in the focus group study (Hertzog et al., 2020) said:

> So, I think one of the biggest problems facing children of color, exceptionally smart or otherwise, is being pegged as violent when really, they're just diverse. They're in the process to get suspended, expelled, put into prison, and so like yeah, my problem would definitely be identification about these gifted programs.

This parent is not alone in seeing the problem related to race. According to a joint position statement from NAEYC (2014):

> While African American children make up 18 percent of public school preschool enrollment, they represent 48 percent of preschoolers suspended more than once, leaving them with few supports and fewer options to ensure they are able to participate in high-quality early learning during this critical period in their development. (p. 1)

These statistics reveal the biases educators have toward Black children and the tremendous impact that suspensions may have on young students' self-confidence and self-identities as positive contributors and learners in the classroom. Students of color who are suspended are certainly less likely to access gifted education or other advanced or enriched curriculum and instruction, perpetuating the inequities in achievement and underrepresentation in gifted programs.

Addressing Challenging Behaviors

All teachers have students with challenging behaviors in their classrooms, and all parents witness challenging behaviors at home. But with careful planning, appropriate activities and interactions, and culturally responsive environments, most of these behaviors can be mitigated (with exceptions for students with severe behavioral disorders). Most behavior challenges can be seen as learning opportunities for young children. Gartrell (2004) described differences between misbehavior and mistaken behavior. He said, "Traditionally, misbehavior implies willful wrongdoing for which a child must be disciplined (punished)" (p. 8). Mistaken behavior is a result of a child's normal development, and children need guidance to develop skills of cooperation, conflict resolution, and expression of strong emotions. Gartrell's work shifts thinking from Dreikurs's (1968) seminal work in behavior management, where he identified four goals of misbehavior: "attention getting, power seeking, revenge seeking, and displaying inadequacy" (p. 11). According to Gartrell (2004), Dreikurs viewed social acceptance as the primary

motivation in children's behavior and advocated natural consequences to correct and shape children's behavior.

Gartrell pointed readers in the direction of Harlow's (1975) relational patterns. Relational patterns are ways in which children relate to situations, persons, and things in the school environment. Gartrell (2004) used Harlow's categories and described three levels of mistaken behavior:

- Level 3: Strong-needs mistaken behavior (survival),
- Level 2: Socially influenced mistaken behavior (adjustment), and
- Level 1: Experimentation mistaken behavior (encountering).

Gartrell (2004) described Level 3 as the most serious because it indicates psychological or physical pain in the child's life that the child is not able to cope with and understand. To protect themselves, these children resist change and exhibit the same behaviors over time even if they are extreme or inappropriate. Children in Level 2 may lack self-esteem and rely on and seek approval from others. Gartrell (2004) noted, "Level 2 mistaken behaviors are 'learned behaviors' reinforced in the child, intentionally or unintentionally, by other people important in the child's life" (p. 15). Children at Level 1 show autonomy. They are experimental in their behavior through full engagement in situations and "are susceptible to mistaken behavior—and vulnerable to teacher criticism" (Gartrell, 2004, p. 14). Knowledge of these patterns of behavior help parents and teachers respond to children and assist them in learning new and positive behaviors. Gartrell summarized, "The adult who is able to approach children as worthwhile individuals who make mistakes is in a philosophically strong position to assist them with healthy personal and social development" (p. 17).

Counselors may help parents with their child's behavior by changing parents' frame of reference from thinking about misbehaving, which implies the need to control or punish the child, to understanding the concept of mistaken behavior, which gives adults guidance to provide more successful and positive interactions. Thus, parents would benefit from seeking ways to assist their children in engaging in positive behavior rather than control or punish behavior. Likewise, teachers may have more success addressing students' challenging behaviors by shifting their mindset and changing their interactions. In particular, counselors may provide guidance to both teachers and parents on how to give children more autonomy.

Supporting Prosocial and Emotional Development

Children develop autonomy through self-regulation—the ability to control and direct one's own feelings, thoughts, and actions. An abundance of research suggests "self-regulation predicts success throughout a child's lifespan" (Riley et al., 2008, p. 67). Riley et al. (2008) reported studies that demonstrated children who were better at self-regulation in the preschool years had more self-confidence, higher self-esteem, and better cognitive and social skills, as well as higher academic performance, than their peers. The authors stated, "Even more amazing is the fact that better self-regulation during early childhood predicts occupational success and general life satisfaction during adulthood" (Riley et al., 2008, p. 67).

Riley et al.'s (2008) practical suggestions for teachers to help develop children's self-regulatory skills could also be applied to parents. The authors described the importance of establishing routines, increasing responsibility by giving children choices, and encouraging time for reflection. Consistency is also important. According to Webb et al. (2007), "When parents differ in standards, limits, and expectations, guidelines for children are unclear, and the result is often underachievement, power struggles, or the manipulation of one or both parents" (p. 94).

There are strategies that help children develop self-regulation, which in turn enhance positive social and emotional competencies. According to Riley et al. (2008), "Much of the adult-child conflict in this period can be limited by letting children make their own decisions whenever possible and by exercising socialization pressure selectively" (p. 71). The adult still has a very important role to play in supporting the growth of the child's self-regulation skills.

Developing Positive Relationships

Much research has shown the impact of the family on children's social competencies in the early years. Katz and McClellan (1997) summarized their review of the literature, saying "it is likely that social experiences in the first five or six years of life provide the foundation on which all future relationships exist" (p. 19). The body of research on parenting styles is too large to discuss here, but research supports that "there is substantial evidence concerning the deleterious effects of frequent exposure to adult anger on children's emotional and hence social development, even when the anger is not necessarily directed at them" (Katz & McClellan, 1997, p. 15).

Parents must start with their own positive relationships with their spouse and those around them in order to help children nurture friendships and positive relationships with other adults and peers. Counselors must emphasize to parents the important role they play in developing positive relationships, characterized by trust and reciprocity with their children. According to Espinosa (2010):

> The most credible and current scientific findings about the environmental conditions that promote healthy development and positive outcomes for children strongly suggest that all children ages 3 to 6 need stable, positive, and nurturing relationships from the earliest moments in life. (p. 35)

Young children need to find positive and nurturing relationships in their day care or school settings, too. According to Marcelo and Yates (2019), "Structural inequalities (e.g., racism, sexism), as well as biased prejudicial beliefs and discriminatory actions that are supported by these systems, are pernicious threats to positive development," (p. 253). Children as young as 6 years old can understand their ethnicity and race and can perceive racial and ethnic discrimination. Families of color may want to protect their children and not put them into what they have deemed to be "White spaces," where they feel they do not belong.

Teachers should be encouraged to seek professional development in antibias curriculum and instruction to ensure they are designing welcoming environments where all children feel they belong. Teachers should also be encouraged and work with school counselors to explicitly integrate the social and emotional benchmarks or learning standards of their state to help children develop positive relationships with all those around them.

Counselors should be prepared to talk to parents about the ramifications of being placed into gifted programs. Gifted education placements may take children away from their neighborhood schools, friends, and families that are close by. Counselors should be prepared to understand and help parents discuss how a move out of their neighborhood school (and possibly a longer bus ride) may add stress to the child, or whether being in a class where other children do not look like them may add stress from feeling they do not belong. Stress was a legitimate concern of a focus group participant (Hertzog et al., 2020):

> I had the concern of whether—she also suffers from anxiety—whether that change of school, change of environment, change of friends, is too hard and would it be stressful and she didn't need that stress in second grade, right?

Counselors can help parents and teachers by supporting a positive educational environment in services for identified gifted students. Students should be encouraged to play or work with other children, share information, and be respectful of others. Both parents and teachers can help students engage in their own learning and develop autonomy by presenting choices and activities that strengthen students' interests. Even more importantly, parents and teachers should provide opportunities for children to see other children's interests, to engage in perspective taking, and to understand other children's feelings.

Remembering that children need to practice their skills to improve, parents should not be discouraged when play dates go awry or when conflicts arise. In the classroom, teachers may approach discrimination and tolerance head on with age-appropriate activities and discussions. For further reading about social justice in early childhood education, see work by Pelo (2008) and discussions of how to create identity-safe classrooms in Steele and Cohn-Vargas (2013).

Children need opportunities to engage in problem solving, perspective taking, empathy, and rational thinking, as well as regulating their emotions. Parents must learn a delicate balance of involvement in their young child's life. They must not be too overprotective so that their children never experience those negotiation opportunities, and yet they must be sensitive enough to know the challenge level and the boundaries where their children strive to mediate their social skills with some measure of success. Just as mistaken behaviors can be seen as a recursive cycle, "prosocial behaviors and friendships is a circular process: prosocial behavior leads to friendship, and friendship is the context for learning prosocial behavior" (Riley et al., 2008, p. 48).

Conclusion

In this chapter, I focused on the urgent need for counselors to take an active role in helping young children and their families have a sense of well-being and belonging in gifted education programs. I have made explicit the inequities in access to mental health treatments for families and children of color, and the necessity to address these inequities in school settings. Teachers and counselors can work together to lower stress and improve the mental health and well-being of all of their students while recognizing the additional stressors that are experienced by families and young children of color.

In conclusion, let me reiterate what I feel counselors need to know, understand, and be able to do with regard to addressing the needs of young children who would benefit from enriched or advanced instruction. Counselors need to advocate for dismantling the traditional identification process that relies on

scores from standardized tests to determine educational needs and segregated placements for young children. Counselors need to help parents and teachers see strengths that are not identified by measures of intelligence on a standardized test of cognitive ability. Counselors also need to be aware of the particular problems when making high-stakes decisions for young children based on standardized test scores. Counselors should help families whose young children are making transitions into gifted programs and for whom these placements incur increased emotional or social stress.

Parents may seek help finding appropriate educational opportunities to keep their child stimulated. Counselors need to understand and be attuned to asynchronous development that may be more pronounced in children who have strengths in academic areas but are on par with their age peers in their physical, social, and emotional development. Asynchronous development may cause frustration in children. Children have ideas about what they would like to do, but they do not have the skills to implement their ideas. They may envision finished products but cannot produce them, or they may ask for help but are not able to explain what type of help would accomplish their visions. Parents, peers, and others may only see the behavior problems caused by the frustration. Counselors helping families with these problems need to understand ways in which culture impacts family views on parenting, discipline, independence, education, and the roles of family members.

Counselors should be able to help children and their families facilitate the development of social competencies by providing strong support for positive and healthy relationships in families and in classrooms. They should encourage parents to find opportunities for young children who are advanced academically or socially to be with others who have similar interests and talents (same-age peers or otherwise). They should help parents and teachers locate resources for these activities. In addition, counselors may provide a forum for parents or families to network with others who wish to have discussions and share similar stories of family successes and challenges.

Counselors should be able to provide resources to families who seek help with parenting strategies or worry about psychological disorders. They should be able to refer families to appropriate medical or psychological facilities for more thorough evaluations when they feel they are warranted. Parents of young gifted children generally know their children better than other adults do. Any signs of sudden changes in their children's externalizing or internalizing behaviors should prompt parents to seek advice from a health professional.

Finally, I conclude by sharing advice written by Pfeiffer (2003), who counseled parents to "not forget that their gifted child has the same developmental, emotional, and social needs as other children who are not gifted, an important

point that can be overlooked when raising a child who has special gifts" (p. 175). Pfeiffer advised parents to keep in mind four principles: (a) promote balance in the child's life, (b) normalize the child's experiences, (c) set and enforce limits, and (d) encourage social intelligence.

From an equity perspective, these suggestions may be more difficult for children and families who have been disenfranchised by biased educational systems or whose teachers have made explicit or implicit comments that make young children feel less successful or competent. Keeping in mind the great disparities in the U.S. mental healthcare system, counselors must not wait for parents to seek out their help. Instead, counselors should be proactive to support families and teachers who are feeling stressed under current contexts. Counselors may be key leaders to promote health and well-being in families and in schools. They may work closely with teachers to integrate the teaching of skills that promote healthy social and emotional growth, and they may be working with families to help them find resources that mitigate the impact that stress has on their children's well-being. Now, more than ever, counselors need to be involved to promote mental health for all children, including the young and most vulnerable.

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CHAPTER 14

Social and Emotional Considerations to Support Gifted Students of Color

NANCY CHAE AND CITLALI E. MOLINA

Gifted students experience social and emotional issues connected to their unique experiences as students with high abilities. Gifted students experience social and emotional issues related to their academic advancement in which they may appear different compared to their same-age group peers; thus, some experience fewer friends, bullying, or social isolation (Reis & Renzulli, 2004; Ronksley-Pavia et al., 2019). Other social and emotional developmental concerns include underachievement, developmental stuckness, suicidal ideation and behavior, emotional intensity, and feelings of anxiety (T. L. Cross, 2016; Ely, 2010; Peterson, 2015; Zakreski, 2018). Further, Ronksley-Pavia et al. (2019) found that protective factors, such as support networks, stable friendships, and supportive families, can foster gifted students' social and emotional development and stability.

Although researchers have identified social and emotional needs of gifted students, there is a call for special attention to social and emotional considerations when counseling gifted students of color, who encounter experiences related to intersections of their racial, ethnic, cultural, and academic identities (Mayes et al., 2018). Counselors play an important role in supporting all children, adolescents, and their families, and when working with diverse gifted students, counselors also advocate for equitable treatment and access to opportunities and resources for all students. Moore et al. (2005) implored professionals who work with diverse gifted students to consider how students' cultural, social, and psychological needs affect

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their academic achievement, belonging, and safety. Counselors must first understand the confluence of multidimensional identities of gifted students of color and the experiences that directly influence their experiences in school. Moreover, counselors must address several considerations that contribute to and perpetuate issues connected to social and emotional wellness, including systemic barriers, racial identity development, social connectedness, coping skills, and connections with parents, guardians, and families of gifted students of color.

Gifted Students of Color

Gifted students of color have and experience diverse identities that intersect with their high abilities, which contribute to various social and emotional experiences in their learning environments. Gifted students of color may come from various racial and ethnic groups, such as Asian American and Pacific Islander, African American, Hispanic and Latino, and Native American. Gifted students of color may be identified as English language learners (ELLs) or linguistically diverse, and they may also come from lower socioeconomic backgrounds.

Asian American and Pacific Islander Gifted Students

Although data presented by the National Center for Education Statistics (NCES, 2020b) reported the overrepresentation of Asian students in gifted education, Yoon and Gentry (2009) argued that Asian American and Pacific Islander (AAPI) students are actually underrepresented, especially considering their more than 50 different ethnic backgrounds. A unique struggle among AAPI students can be attributed to the model minority myth, which overlooks aspects of their identities and neglects to meet their unique needs under the mask of being considered model minorities (Siegle et al., 2016). For instance, many students from Southeast Asian and Pacific Islander backgrounds often experience high poverty, lower achievement, and lower postsecondary degree attainment in comparison to other student populations in the United States (White House Initiative on Asian Americans and Pacific Islanders, n.d.). The diverse ethnic identities and the model minority myth position AAPI students into concealing their unique struggles, poor academic achievement, and underrepresentation in gifted education programs, thus silencing and overlooking the complexity of these students (Kitano & DiJiosia, 2001).

African American Gifted Students

African American students comprise approximately 15% of more than 50 million public school students in the United States (NCES, 2020b). However, they remain underrepresented in gifted and talented programs nationwide, in part due to issues like inequitable school practices and deficit-based perspectives of African American students (Ford, 2014b; NCES, 2020b; Siegle et al., 2016). Moreover, Moore et al. (2005) posited that racial identity development among gifted African American students and their self-perceptions of their high abilities are important considerations when supporting their social and emotional needs, as these students sometimes experience negative opposition from peers when demonstrating academic engagement. Anderson and Martin (2018) reported that perfectionism, or a desire to excel beyond academic expectations, and stereotype threat, or a feeling of risking confirmation of some negative stereotype, were distressing psychological experiences among gifted Black girls, affecting their achievement and well-being. Educators and counselors alike must keep in the forefront the historical and cultural oppression faced by Black students (Siegle et al., 2016) and how such internal and external, as well as explicit and implicit, forces influence their identities, self-efficacy, and achievement as gifted learners.

Hispanic and Latino Gifted Students

Hispanic students are the largest growing student body in the United States (NCES, 2020b), yet they continue to remain underrepresented in gifted and talented programs (Ford, 2014a). Ford (2014b) and Hurt (2018) reported that the underrepresentation of gifted Latino students stemmed from educators who held deficit orientations as well as engaged in implicitly racist practices of gifted identification. Along with African American students and students from low-income backgrounds, Hispanic students are often subject to microaggressions related to their giftedness and diverse cultural identities (Stambaugh & Ford, 2015). Further, like gifted ELLs, gifted Hispanic students may benefit from educators who intentionally identify giftedness through multiple lenses and implement a culturally relevant curriculum to allow for students' gifts and abilities to surface (Esquierdo & Arreguín-Anderson, 2012). In addition, many Hispanic cultures display collectivistic and group-oriented characteristics (Brice & Brice, 2004), and as a result, counselors can include and provide support to families when identifying Hispanic students for gifted programs.

Native American Gifted Students

Native American students are least represented in gifted education in the United States. Native American students are also often misidentified as underachievers and maintain high dropout rates (Gentry et al., 2014). Furthermore, there is evidence that gifted education and general education systems and structures may not meet these students' unique needs, forcing cultural assimilation within the educational environment rather than embracing their integrative diverse cultures and natural gifts (DeVries & Shires-Golon, 2011; Giordano et al., 2020). It is also important to include and emphasize the diverse cognitive and communication styles and learning preferences of gifted Native American students. For example, Native American students may focus on nonverbal communication, be more introspective versus questioning, and be more accustomed to indirect communication, which may result in underidentifying and underserving these students (Omdal et al., 2011). Inclusion of unbiased culturally responsive history and contexts into curricula is imperative to honor the cultural values and needs of Native American students (Gentry et al., 2014; Giordano et al., 2020).

Linguistically Diverse Gifted Students

Few students in gifted education are identified as English language learners or linguistically diverse. In addition, ELLs often have various intersecting identities, such as low socioeconomic backgrounds and immigrant or first-generation experiences, and they may also be the only English language speaker in their households. ELLs may be overlooked in the identification process due to language barriers in testing processes and perceptions of their cultural and linguistic diversity as a deficit to gifted programming (Ford et al., 2008b; Siegle et al., 2016). To support ELLs, counselors need to reexamine their identification processes and utilize criteria such as nonverbal assessments to equitably identify linguistically diverse students who may benefit from gifted education (Esquierdo & Arreguín-Anderson, 2012; Siegle et al., 2016). Moreover, counselors can find ways to value and honor students' and families' unique cultural voices and promote resilience and coping strategies that promote their continued success in gifted education experiences (Herr et al., 2012). It is important to see the potential of bilingualism and biliteracy among gifted learners to ensure appropriate gifted education programs for all students (Kitano, 2003).

Gifted Students From Low-Income Backgrounds

Gifted students from low-income backgrounds face a confluence of factors, such as racial, school, community, and family experiences, that affect achievement outcomes and identification for gifted education services (Olszewski-Kubilius & Corwith, 2017). In a study of the effects of poverty on student identification for gifted programs, Hamilton and colleagues (2017) examined more than 330,000 students in three states and found that students from economically disadvantaged backgrounds were less likely to be identified for gifted services. In particular, students from low-income families who attended underresourced schools were even less likely to be identified (Hamilton et al., 2017). In addition, for gifted students in poverty, it is possible that counselors, educators, and administrators may overlook their giftedness to address these students' more pressing financial, social, emotional, or safety needs. For students from low-income families, it is important to foster their self-efficacy beliefs and collaborate with families to support successful academic learning (Kitano, 2003). Kitano (2003) posited that increasing the economic diversity of students in gifted education is necessary to address these students' creativity, resilience, potential, and other strengths exhibited in the face of adversity. Counselors can support students in poverty by promoting intentional identification practices that remove barriers to identifying their gifted potential. Further, counselors must understand the systemic scope of inequities that gifted students from low-income backgrounds face, hindering their access to as well as their academic, social, and emotional experiences in gifted education.

Systemic Barriers

When gifted students of color are in environments that fail to meaningfully challenge their learning and creativity, they may develop social and emotional issues (Kitano, 2012). Further, when considering the learning environments of gifted students of color, it is critical to acknowledge the systemic issues of practices and policies that have historically marginalized and continue to marginalize gifted students of color in equitably accessing such environments. In other words, gifted education has historically been a "White space" (Wright et al., 2017, p. 48). Systemically, gifted students of color—particularly those who are African American, Native American, Hispanic, twice-exceptional, English language learners, economically disadvantaged, or from rural areas—are more often underidentified for gifted education programming, and thus, underrepresented compared to their White peers (Olszewski-Kubilius & Corwith, 2017; Siegle et al., 2016).

According to a report by the Civil Rights Data Collection (CRDC, 2016), students of color continue to be underrepresented in gifted and talented programs. The overall demographics of the student population in U.S. public schools are as follows: 48.8% White, 27% Hispanic, 5% Asian, 15% Black, 4% two or more races, 0.8% American Indian or Alaska Native, and 0.2% Native Hawaiian or Other Pacific Islander (NCES, 2020b). In addition, 14% of U.S. students received special education services under the Individuals With Disabilities Education Act (IDEA), and 10.1% of U.S. students were identified as ELLs (NCES, 2020, 2020c). However, the distribution of students in gifted and talented programs is overly represented, with White students totaling 58.8%, while students of color are disproportionately underrepresented: 18.1% Hispanic, 9.9% Asian, 8.5% Black, 3.7% two or more races, 0.8% American Indian or Alaska Native, and 0.2% Native Hawaiian or Other Pacific Islander (CRDC, 2016). In addition, with 10.1% of English language learners in the United States, only 2.6% are identified as gifted/talented, and only 2.3% of students with disabilities (with 14% in the population as a whole) were reported to be in gifted/talented programs (CRDC, 2016). Further, although there were few differences in gender across gifted students of color, the largest disparity was between Black gifted students. Specifically, fewer Black males (7.6%) were enrolled in gifted/talented programs compared to 9.4% of Black females (CRDC, 2016).

A major systemic contributor to the underrepresentation of gifted students of color has been and continues to be underidentification. Grissom and Redding (2016) found that even when Black students had similar academic profiles as White students, White teachers were still likely to underrefer Black students for gifted programs. Further, Ford (2010) identified four roadblocks that contributed to disproportionate access to gifted and talented programs for culturally, linguistically, and economically diverse students: deficiency of referrals from teachers, students' performance on traditional intelligence and/or achievement tests, outdated policies for identification and placement, and social and emotional concerns of students and their parents' decisions about their children's participation in gifted education. Moreover, even experienced teachers who worked with economically marginalized students and students from underrepresented racial groups had a narrow understanding of high ability and failed to recognize nontraditional characteristics of high potential (Cisneros et al., 2014; Walker & Pearsall, 2012). Hurt (2018) also found that teachers perceived students with divorced parents or those from transient families as not fit for gifted programs. Such deficit-based views and negative perceptions of cultural differences affect teachers' and counselors' identification of students of color for gifted education, further sustaining the status quo and privileging the disproportionate identification of White students for gifted services (Barlow & Dunbar, 2010; Goings & Ford, 2018; Hurt, 2018; Wright et

al., 2017). The minority of gifted students of color who are identified for gifted services may also feel a lack of belonging in the classroom and even tokenization (Taliaferro & DeCuir-Gunby, 2008), further contributing to their social and emotional harm.

Stambaugh and Ford (2015) also reported that many underrepresented students, particularly gifted Black, Hispanic, and economically disadvantaged students, were susceptible to experiences of racial microaggressions, or inappropriate and often hurtful comments based on student characteristics or history. Microaggressions may be both intentional and unintentional, but regardless, they are biases against underrepresented students that communicate and further sustain racial or ethnic stereotypes about student populations (Stambaugh & Ford, 2015). For example, when elementary school teachers and administrators promoted racialized notions of giftedness, African American students reported feeling less confidence and comfort about their intelligence and enrolled in fewer Advanced Placement (AP) courses, further reinforcing inequitable course enrollment (Kolluri, 2018). Collins et al. (2019) also suggested that teachers may misinterpret Black girls' enthusiastic questions and regular participation as overwhelming, believing that they may not fully understand the content. Gifted African American students, in particular, have reported feelings of needing to prove themselves when teachers set low expectations or held stereotypes about their abilities, resulting in experiences of stress and hyperawareness (Bonner et al., 2019).

Such deficit-based and stereotyped perspectives not only hinder opportunities for identification and provision of gifted education services for underrepresented students (Ford et al., 2008b; Goings & Ford, 2018), but also contribute to experiences of discrimination and prejudice, which affect the self-esteem, confidence, and socioemotional wellness of gifted students of color. Gifted students of color reported feelings of frustration, anger, stress, and anxiety as a result of discriminatory experiences (Bonner et al., 2019). In school settings, for example, school counselors have a critical role in engaging in recruitment and retention efforts that oppose and restructure discriminatory identification practices and systems, provide equitable access to gifted education services for gifted students of color, and offer resources for success to students and families (Hurt, 2018). Moreover, counselors must continue to be aware of their own biases and stereotypes (as well as those of their colleagues) and how such assumptions affect their abilities to build relationships with and support diverse students as well as develop as multiculturally competent professionals. Next, understanding the interconnectedness of racial identity development and its influence on the social and emotional experiences of gifted students of color is another important aspect of working with these learners.

Racial Identity Development

Gifted students of color grapple with understanding their own personal and cultural identities, which impacts their confidence and self-efficacy in academic and social spaces. Grantham and Ford (2003) discussed the relevance of racial identity development of gifted students of color on their social and psychological well-being. E. M. J. Smith (1989) argued that racial membership and healthy regard for one's race contributes to psychological wellness for students of color. Gifted and high-achieving Black students often experience the conflict, or "social-emotional tug-of-war" (Grantham & Ford, 2003, p. 22), of connecting to and seeking acceptance from their Black identity and culture, while attempting to meet or exceed the expectations of academic achievement in the dominant culture (Ford et al., 1993). Ford et al. (2008a) found that Black gifted students were familiar with how perceptions of negative peer pressures, such as acting White, undermined their attitudes toward education and academic performance. Some gifted Black students may experience an identity crisis represented through underachievement, or sabotaging their academic performance; feelings of loneliness, isolation, and rejection; and increasing preoccupation with racial identity issues to avoid acting White as they understand how to fit in with peers and cultural expectations (Ford et al., 1993; Grantham & Ford, 2003; Mayes et al., 2018). However, the experience of acting White may not be the case for all gifted Black students, as it may relate to school contexts (Grantham, 2004; Tyson et al., 2005). Such psychological impacts of racial identity development influence the self-concept and self-esteem of gifted students of color, which further affects achievement, motivation, and attitudes toward school and experiences of negative peer pressures (Grantham & Ford, 2003).

Moreover, as gifted students of color continue to grapple with balancing their gifted identity, racial and cultural backgrounds, and social experiences, stereotype threat is another phenomenon that may affect their academic achievement and social and emotional well-being. Gifted students of color may fear that their performance is being judged based on negative societal stereotypes, resulting in intellectual underperformance, feelings of anxiety, pressures of perfectionism, and decreased sense of motivation, self-concept, and self-esteem (Anderson & Martin, 2018; Goudelock, 2019). Unfortunately, "if poor performance is expected from a particular racial or cultural group, that group tends to live up to that expectation" (Mayes et al., 2018, p. 51). For example, Ford et al. (2008a) found that Black gifted students attributed acting Black to lower academic interest or performance, negative behaviors, and wearing urban clothing, lending to their perceptions of negative stereotypes of giftedness due to peer pressures.

With Asian American students, the model minority myth often stereotypes these students as high-achieving and overrepresented in gifted education. However, this stereotype also overlooks the complexity of the AAPI community (Siegle et al., 2016). In response, counselors must critically and continually self-reflect and question their own assumptions and misconceptions about gifted students of color and support their fellow colleagues to do the same, as educators' explicit and implicit biases negatively impact gifted students of color (Anderson & Martin, 2018). Further, counselors provide supports for gifted students of color as well as communicate and instill antiracist messages and practices that help these students to develop a strong racial identity, access safe spaces to express their experiences without minimizing or negating them, and gain opportunities to demonstrate their strengths to highlight their self-confidence (Anderson & Martin, 2018). Another consideration of the social and emotional needs of gifted students of color includes social connectedness.

Social Connectedness

Social connections and engagement with peers are important contributors to the academic performance and socioemotional well-being of gifted students of color, as they often experience heightened emotional sensitivity connected to their giftedness (Rodgers, 2008). Neihart (2006) posited that gifted adolescents often experienced such achievement or affiliation conflicts when certain achievement attitudes or behaviors were associated with the betrayal of their cultural identities. Gifted students of color, particularly African American and Hispanic students, reported feeling negative pressures and even opposition from their peers, such as being teased for acting White (Bonner et al., 2019; Moore et al., 2005). Such intense pressures to maintain their academic identity while also connecting with the peer groups contribute to feelings of marginalization and powerlessness, as well as feelings of rejection, exhaustion, and frustration from family and friends (Bonner et al., 2019; Neihart, 2006). Gifted students of color risk feeling isolated by their fellow peers of color as well as alienated by White peers in gifted programming, as researchers have suggested that identifying with one's racial and cultural group contributes to a sense of belonging (Grantham & Ford, 2003; Henfield, 2013; Parris et al., 2010).

Gifted students of color may withdraw psychologically, socially, and emotionally from their academics in response to feeling a lack of or need for belonging (Moore et al., 2005). Other struggles include underachievement, risk avoidance, and reduction in aspirations and achievement (Neihart, 2006). In particular, gifted students of color "highly valued the reward of acceptance in their racial

and cultural communities, even at the expense of identification with giftedness or academic achievement in general" (Rodgers, 2008, p. 118). Moreover, in a study of giftedness among Native American students, Lakota group members reported that gifted youth often suppressed their high ability out of fear of peer rejection, rather than for humility (Gentry et al., 2014). Peer connections are often stronger motivators than academic achievement, and counselors can be mindful of facilitating initiatives and interactions that help gifted students of color to feel a sense of belonging with culturally and linguistically diverse peers while also fostering their feelings of empowerment as high-ability learners.

Further, gifted students of color often engaged in code switching as a result of the negative stigma associated with giftedness (Hughes et al., 2006). Code switching is "a process of deliberately changing behaviors to accommodate the expectations of an environment in order to realize their potential" (Neihart, 2006, p. 199). As gifted students of color grapple with multiple intersecting identities (e.g., giftedness, race/ethnicity, gender), they actively and sometimes even unconsciously negotiate and switch between identities to fit into given social contexts without feeling as if they risk betraying or compromising their identities (Neihart, 2006; Rodgers, 2008). Some gifted students of color engage in code switching as a means of coping with the potential negative peer pressures related to their achievement while protecting and balancing their high abilities with social acceptance with peers (Neihart, 2006). Hughes et al. (2006) suggested that linguistically diverse students, who are underidentified for gifted programming, regularly engage in code switching between languages, and teachers who lack awareness of code switching may neglect to consider the possibility of giftedness as evidence of high ability and higher order thinking skills. For instance, in school settings, school counselors can employ interventions, such as small groups and classroom lessons, that broach topics of race among gifted students of color and create programs that nurture feelings of inclusion and community and empower students inside and outside of the classroom (Henfield, 2013). In addition, counselors play an important role in promoting coping skills for gifted students of color.

Promoting Coping Skills

Gifted students of color have unique experiences related to systemic barriers, discrimination and prejudice, racial identity development, and social connectedness. Moreover, students from low-income backgrounds and culturally diverse gifted students may experience adversity and stressors, such as poverty, linguistic diversity, and prejudice. Kitano and Lewis (2005) suggested that gifted students of color may also possess flexibility in coping strategies and psychological adjust-

ment, as their high ability, intelligence, and overall cognitive development may contribute as a protective factor. It is imperative that counselors provide opportunities for students to develop psychological resources, such as effective and positive coping skills, to help manage peer conflict, stress, and pressure (Parris et al., 2010). Coping skills also help gifted students to grow from challenging experiences as well as develop strategies that enhance self-efficacy and, in turn, resilience (Herr et al., 2012).

When counselors work with gifted students of color, it is necessary to consider coping strategies that may be unique to students' cultural experiences and values. For example, researchers found that Black students more often used problem-focused and emotion-focused coping strategies compared to White students, and Black females were more likely to seek help in dealing with stress than Black males, who were more reluctant to seek help from formal mental health service providers (Henfield, 2013; Kitano & Lewis, 2005). Among Native American students, Gentry et al. (2014) found that they were not often taught to openly express their feelings and knowledge. Instead, their community promoted a cultural norm of introspection. For example, Ojibwe youth would go into nature when feeling stressed to maintain a connection with the natural world (Gentry et al., 2014). Moreover, in a cross-cultural study of gifted students' social experiences of giftedness in Ireland, South Korea, the United Kingdom, the United States, and France, students reported responding to social rejection, jealousy, or pressure through hiding, conformity, helping others, and self-focus (J. R. Cross et al., 2019).

Wright et al. (2017) suggested a number of ways for counselors to develop and promote coping skills among gifted students of color. Counselors need to acknowledge the complexities of cultural diversity related to giftedness and understand the intersections of diverse cultural identities among gifted students of color. Stambaugh and Ford (2015) suggested that counselors help students to embrace biculturalism, especially for Black and Hispanic students, which can help them to survive and thrive in educational settings. Rather than minimizing or ignoring systemic issues of discrimination, counselors validate the experiences of students of color and work toward mitigating stereotype threat and anxiety by challenging negative stereotypes, revising recruitment and retention strategies in gifted programming to be equitable, and building racial trust (Kitano, 2012).

Moreover, school-based counseling services and interventions, such as individual and small-group counseling and classroom lessons, and mentorship opportunities can support gifted students of color's transition into and experiences in gifted programs (Henfield, 2013; Lovett, 2011). Counselors can employ programs that include culturally responsive social and emotional learning curricula and interventions focused on developing noncognitive factors in academic achievement.

Such curricula and interventions can help students to overcome institutional and social barriers in their participation in gifted programming, increase self-esteem and academic self-efficacy, and experience a sense of belonging, safety, and community with peers and school staff (Ecker-Lyster & Niileksela, 2017; Kitano, 2012). Such programs and interventions must also acknowledge and address the implicit nature of Whiteness and privilege that contributes to the systemic barriers that affect equitable access, opportunities, and success in gifted education for gifted students of color (Collins et al., 2019). Furthermore, connecting with families of gifted students of color is another important practice to support students' social and emotional development and empowerment.

Connecting With Families of Gifted Students of Color

The family system plays an important role in students' identity and talent development (Olszewski-Kubilius & Thomson, 2010). Parents are the first and primary support for students, and oftentimes their success in schools is connected to the amount of external support they receive (J. G. Smith, 2006). More specifically, given the emphasis of collectivistic cultural values of the diverse identities of various populations of color, family involvement is critically important to successful outcomes for students of color. Families of students of color and those from low-income backgrounds can offer additional insights to counselors, as families observe their child's ability and strengths at home and within vast environments outside of the school setting. However, Lovett (2011) reported that parents of gifted students of color may remove their children from gifted programming due to social and emotional issues and to help their children feel more comfortable and smarter in general education classes.

Counselors can help to empower parents as advocates for their children in a number of ways. Counselors can include education for parents about general gifted characteristics and invite them into the educational process of their students, which is fundamental to increasing equity and access for students of color in gifted education. For example, counselors can help parents to initiate the process for identification for and access to gifted programming, as well as offer lists of questions and answers to help identify characteristics of gifted students. It is also important to create and sustain effective partnerships between and among schools, families, and communities, such as forming support groups for families of gifted students of color, and intentionally provide additional academic, social, and emotional resources to help equip their students for success. For instance, with Native American students, it may be important to include family members and

tribal elders to integrate their cultural knowledge of students to provide a holistic picture of students' abilities and enrich the educational curriculum (Gentry et al., 2014). For gifted students of color who are immigrants themselves or whose families are immigrants, counselors must be aware of and support these students and their families to navigate language barriers, dual cultural identities, economically disadvantaged circumstances, and intergenerational and cultural conflicts, which may affect their access to needed resources such as mental health supports (Kitano, 2012). To further increase access to gifted education services within communities, counselors can also organize parent workshops in various formats, including virtually, in accessible community settings (e.g., local churches, community centers, public libraries), and in various languages to increase buy-in from families and enhance access and support for gifted students of color. Establishing a trusting relationship with positive school and family partnerships can promote cooperative learning and trust with culturally diverse families (Parris et al., 2010).

Conclusion

Counselors have an essential role in identifying, supporting, and advocating for the social and emotional needs of gifted students of color and their families from diverse cultural and linguistic backgrounds and experiences. By understanding the diverse identities and experiences of gifted students of color, counselors also gain awareness of and respond to issues, including systemic barriers, racial identity development, and social connectedness, to promote coping skills and connections with these students' families. The social and emotional experiences of gifted students of color impact their academic achievement, motivation, and self-efficacy. Counselors can help to transform the biases and misconceptions of giftedness to promote a strength-based lens in working with and advocating for gifted students of color as well as supporting them to be successful. Counselors empower gifted students of color and their families as well as enhance their overall social and emotional development and wellness.

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CHAPTER 15

More Is Different: Understanding and Engaging the Exceptionally Gifted Child[1]

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To engage an exceptionally gifted child is to engage complexity. Such remarkable, precocious individuals are among the most misunderstood and vulnerable persons in this society. As one parent and champion of the needs of exceptionally and profoundly gifted children wrote:

> To understand highly gifted children, it is essential to realize that, although they are children with the same basic needs as other children, they are very different. Adults cannot ignore or gloss over their differences without doing serious damage to these children,

1 We are indebted to Nobel Prize Laureate Phillip Anderson, Ph.D., for his salient 1972 article "More Is Different," the title of which we borrowed for our chapter. This seminal article advanced cross-disciplinary dialogue between physicists and biologists that contributed to the development of complexity theory. Simply stated, complexity can be understood as the nature of having "many different parts connected or related to each other in a complicated way" (Collins, n.d.). In his article Anderson (1972) argued that when scientific discovery uncovers greater complexity, "entirely new properties" are often revealed (p. 393). He asserted that this novel situation establishes the need for the scientific community to creatively challenge long-established understandings of fundamental laws and embrace new truths, laws, concepts, and generalizations to remain relevant problem solvers. In other words, when complexity emerges and more parts of a system interact in more ways, a different response is required, as previous and traditional understandings are no longer useful in this new territory. In our chapter, we likewise argue that entirely new properties have been discovered at higher levels of giftedness, which are different than the properties discovered at lower levels of giftedness. Therefore, more complexity in highly gifted children demands a different mindset and approach in school systems to understand and respond in meaningful and relevant ways.

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> for the differences will not go away or be outgrown. They affect almost every aspect of these children's intellectual and emotional lives. (Tolan, 1990, Differences section, para. 1)

The growing literature on exceptionally gifted children verifies this complexity: More is indeed different when it comes to their inner nature. Those in community with extremely gifted children, and especially profoundly gifted children, have witnessed the unique attributes of these children that emerge as byproducts of the interactions among their unique and dynamic parts—attributes that cannot be observed or understood in isolation. Such unique emergent properties characterize complex living systems (Anderson, 1972; Buchanan, 2004; Corning, 1995), and that includes exceptionally gifted children (e.g., Cross, 2018; Daniels & Piechowski, 2009; Grobman, 2009; Gross, 2004). Perhaps this inherent complexity and its resultant systemic differences manifested as emergent characteristics were best articulated by the Columbus Group:

> Giftedness is asynchronous development in which advanced cognitive abilities and heightened intensity combine to create inner experiences and awareness that are qualitatively different from the norm. This asynchrony increases with higher intellectual capacity. The uniqueness of the gifted renders them particularly vulnerable and requires modifications in parenting, teaching, and counseling in order for them to develop optimally. (Morelock, 1992, p. 13)

We posit here that these emergent manifestations can serve as important markers to provoke further investigation for identifying, understanding, and ultimately meeting the complex needs of exceptionally and profoundly gifted children.

Practitioners are cautioned that available research on the wider range of gifted students may or may not be generalizable or reflective of the exceptionally gifted. They are a quite diverse group and represent a small segment of the population, and the few existing research studies targeted to this group often prove limited in application (Jung & Gross, 2014). Nevertheless, some themes have emerged from investigations that can yield meaningful application. These findings have been integrated in this chapter in our review of emergent characteristics often associated with this population.

Researcher Miraca Gross (1993, 2006) found that exceptionally and profoundly gifted children differed quite radically not only from those children of average ability, but also from their moderately gifted peers. She emphasized that few children in her study would even be recognized as gifted under any model

incorporating motivation or task commitment as an integral component of giftedness. Moreover, their curiosity and love of learning only became evident after the children's educational pace was radically accelerated. Gross's salient data on the impact of radical acceleration illuminates a perpetual and troubling outcome of not understanding these emergent properties of exceptionally gifted children: a failure to identify them. Witness the case study of Jonathan.

Case Study: Jonathan—Brilliant or Unremarkable?

Jonathan, a highly observant sixth-grade boy, had been making average to above-average grades across all subjects in school. However, he was chronically disengaged from the classroom, sports, and other social activities typical of boys his age. He walked around with his clothes disheveled, his hair in his eyes, and his hands in his pockets. His teachers dismissed him as lazy. Because of his lack of performance and interaction with others, they found him unremarkable. His nontraditional writing style was said to be inappropriate and somewhat offensive, given the strict and formal religious culture of the private school he attended. One angry teacher even called Jonathan's parents to chastise Jonathan and his parents for such a blatant disrespect of her authority, as he had written his mini-book assignment in a "smart-aleck" tone. Concerned by the troubling relationship between the child and the school, his parents brought Jonathan to a systems-trained counselor, who was also accustomed to working with both family and schools.

Jonathan's therapist found Jonathan to be anything but unremarkable. The therapist was purposeful about establishing a relationship with Jonathan. She enjoyed laughing out loud at the insightful cultural commentaries and irreverent, out-of-the-box humor that ran through his work. She was impressed with his performance in "thinking duels" (e.g., finding 101 uses for the enormous thorns that grew en masse on a vine in his backyard) and thought experiments in session (e.g., "How would life be different if there were no light?").

Attending to emergent qualities suggestive of a substrate of exceptional giftedness, Jonathan's therapist requested a meeting with the school team to discuss the creative thinking, insightful comments, and extraordinary sensitivity and compassion that Jonathan consistently displayed in session. In the meeting, she shared with the team how much she enjoyed his incredible deadpan humor and explained that such humor reveals an ability to perceive multiple levels of meanings in daily experience. The team was unaware that the child had taught himself the basics of electricity when he was 5 and was currently working with his grand-

father on an invention that would convert sound into electricity. She asked the team to participate in a 2-week experiment to observe Jonathan's behaviors in a new light, reframing them as indicators of exceptional intelligence rather than relegating them to the category of behavioral problems.

The following week, the therapist received an email from his math teacher. It read:

> You're not going to believe this. I have already told everyone. I noticed that I was always asking Jonathan to get back into his seat, but I never really thought about why he kept getting up. I noticed that he would somehow make his way back to the board. I thought he was just goofing off. Then I really started watching him: He was working on problems on the board that were left over from my high school students in the class just prior to his—and he was solving them!

Ultimately, Jonathan successfully completed his sound-based generator, and he invited his therapist to his science fair where he was to test its validity and reliability. Subsequently, the family decided to have Jonathan's IQ reassessed: on the Wechsler Adult Intelligence Scale, Fourth Edition (WAIS-IV), his General Ability Index (GAI) score was 145.

Identifying Exceptionality

It is possible to recognize, although not fully comprehend, exceptionally and profoundly gifted children through traditional means of assessment using measures of performance. Gross (2000a, 2000b) reminded practitioners that research highlights the profound cognitive and affective differences between moderately and exceptionally gifted children. She asserted that in intellect alone, a profoundly gifted child of IQ 190 differs from their moderately gifted classmate of IQ 130 to the same degree that the latter differs from a child of IQ 70.

Exceptionally gifted children have traditionally been recognized as those who score above the third or fourth standard deviation on IQ tests (Silverman, 1989). Although categorizations vary, highly gifted children are generally accepted as having an IQ of 145 or greater on a standardized test of ability (Jung & Gross, 2014). Gross (2004) offered more specific categories. In her terms, children with an IQ of 180 or higher are distinguished as "profoundly gifted," and children with an IQ between 160 and 179 are termed "exceptionally gifted." Additional experts

in the field agree in characterizing children who score between 145 and 159 as "highly gifted" (Jung & Gross, 2014).

It is critical to note, however, that in modern assessments some children who may have scored in a higher range on earlier instruments may attain lower scores on modern instruments. This is due to the ceiling effect on both group and individual measures of achievement and intelligence (Silverman, 1989; Silverman & Kearney, 1989). Many current tests do not discriminate as reliably in the upper ranges of ability, as there may not be enough difficult items on these tests to find an exceptionally gifted child's true ability. Overcoming this testing barrier requires above-level testing to arrive at a more accurate assessment of their abilities (Hansen, 1992; Ruf, 2019).

School counselors mindful of identification must also consider that environmental factors surrounding a child can impact the expression of intelligence (Webb et al., 2016). For example, exceptional ability expressed through performance is influenced by a child's socioeconomic environment. Research has demonstrated that highly gifted children are less likely to be recognized in underprivileged environments (Vaivre-Douret, 2011); conversely, those who are identified through traditional means tend to come from economically privileged backgrounds with highly educated parents (Grobman, 2009; Jung & Gross, 2014; Neber & Heller, 2002). Other environmental factors like culture, race, and ethnicity can also make a significant impact and thus affect identification (Coleman et al., 2015; Grissom & Redding, 2016; National Research Council, 2002; U.S. Department of Education, 2014).

In light of the limitations of using cognitive and academic assessment measures as the sole means for recognizing this advanced population, and to identify the full diversity of gifted children, advocates and experts advise the inclusion of multiple types and sources of information to assess a child's true potential (Gross, 2004; Ruf, 2019; Silverman, 2011). Methods that overrely on parent advocacy and teacher referrals have been shown to be problematic; consequently, the use of culturally sensitive, valid, and reliable instruments and the adoption of early universal screening have been shown as viable pathways to increase identification of gifted children (Card & Giuliano, 2015; Grissom & Redding, 2016). Specifically, experts recommend identification within the first 3 years of school. This will ascertain possible benefits of future acceleration and thwart the likelihood of a child's underachieving to fit in socially (Gross, 2006; Hollingworth, 1942).

A more robust assessment process includes a child's developmental history with a focus on early milestones (Gross, 2004; Silverman, 2011). Research has documented advanced neurosensory and neuromotor maturation in high-ability children (Vaivre-Douret, 2011). Exceptionally gifted children tend to move quickly through developmental milestones; for example, they are well known to

exhibit early reading abilities (Jung & Gross, 2014). To better assess the various aspects of a child's developmental history, Ruf (2009, 2019) proposed five levels of giftedness. These collections of early milestones and behaviors associated with each of five levels were created to assist especially in the placement of highly gifted children in the most appropriate educational environments. This spotlights the important elements within the often muddled picture of a child's true potential impacted by learned underachievement and asynchronous development. Ruf recommended the necessity of observing differences in specific degrees of the behaviors and abilities of the child associated with each level to truly clarify the picture.

Perpetual Underperformance

It is possible that underperformance is not only an environmental factor (Webb et al., 2016), but also an unfortunate emergent marker for unidentified exceptionally gifted children, as "nonaccelerands cannot recall a time in their lives when camouflage has not been an automatic survival mechanism" (Gross, 2006, p. 426). This phenomenon is a result of myriad interrelated underlying causes, both individual and environmental, that drive a child's disengagement from the educational process. These include, but are not limited to: social rejection and bullying, adverse childhood experiences (ACEs), trauma, peer pressure to "dumb down" to fit in, perfectionism and failure-avoidance, unrecognized and untreated learning deficits, misdiagnosis, clinical depression and/or anxiety, chronic rebellion or nonconformity, and deficits in self-management and emotional regulation (Bachtel, 2019; Goodman et al., 2012; Johnson, 2018; Schiltz, 2013, 2019; Webb et al., 2016).

A common contributor to the emergence of underachievement is the problem of social rejection and isolation, which continue to plague children in this stratum of intellect (Coleman et al., 2015; Gross, 2000a). Early on, Hollingworth (1942) noticed that this injurious social phenomenon disappeared when these exceptional children engaged daily with other students who were true intellectual peers, despite the chronological ages of the children. More recently, Gross (1994, 2006) found a large difference between the self-esteem of exceptionally and profoundly gifted children who were radically accelerated and those who remained with age-mates or were only accelerated one year. Positive and healthy levels of self-esteem were reported by students who were radically accelerated. This outcome did require a more carefully designed and monitored program of radical acceleration, linked to ability grouping as well as individualized instruction. Importantly, Gross (2006) also noted that nonaccelerands reported significantly

lower levels of life satisfaction, and their self-esteem was described as "disturbingly low" (p. 421).

Lost in Complexity

It has been observed that the thinking of children becomes more evident as intellectual capacity increases (Lovecky, 2011; Silverman, 1993; Webb et al., 2016). Even though accurate IQ assessments and developmental milestones are important means of identification, such information may not be available the moment an educational professional first interacts with a young person. Therefore, it is beneficial to recognize more immediately recognizable traits—the distinct cognitive attributes—that differentiate the exceptionally gifted from their moderately gifted peers (Lovecky, 2011; Morelock & Feldman, 1993). The recognition of complexity itself is displayed by those highly aware of the myriad answers available to any potential question or task approached (Kline & Meckstroth, 1985). Such sensitive awareness quickly provokes an exceptionally gifted child to initiate their own complex analysis, often "get[ting] lost, wandering among their associational networks" (Eide & Eide, 2006, p. 442). The nature of this kind of internal organization often renders the child unable to navigate simple daily demands, making what others find easy unnecessarily complicated for the gifted (Lovecky, 2011). Conversely, these children also have the ability to find the core of a complex idea by embracing the essential element of the idea or perceiving an underlying principle, which then can be applied to further problem solving.

These children are whole-brain thinkers, utilizing multiple parts of their brains in performing imaginative and challenging tasks (Eide & Eide, 2006). Evidence exists that these children have larger information-processing capacity and at greater speeds, granting cognitive flexibility and plasticity linked to sensory integration (Vaivre-Douret, 2011). They have a remarkable ability to store, recognize, and manipulate patterns of many types regardless of whether the information is sensory, abstract, or emotional in nature. Moreover, exceptionally and profoundly gifted children's ability to think holistically enables them to perceive many layers of meaning in any given situation, as they readily experience the world in all its connectedness, with the associated emergent qualities. These include an early grasp of humor, metaphor, symbol, innuendo, and paradox (Gross, 2000b; Lovecky, 2011; Morelock, 1997).

Imaginal Synergies

Some exceptionally gifted—and many more profoundly gifted—children have the ability to go a step beyond, solving one mental problem while simultaneously working on another. Such synchronized immersion in different domains of interest allows the "intellectual octopus" to aggregate patterns across subjects and reflect on how one particular aspect influences another. Typically, these children demand complex information about each subject in order to formulate new connections and associations between patterns and their individual parts (Lovecky, 2011). Even though exceptionally gifted children are able to comprehend the whole thoroughly because their thinking moves through so many associations so quickly, they may reach conclusions without being aware of how they arrived. This becomes troublesome in a classroom setting where they are frequently required to show their work or support their conclusions (Eide & Eide, 2006). While in this intensive process of reflection, these children may appear to be "spaced out" and show signs of disorganization, leaving professionals to underestimate their abilities or view them in light of an attention-deficit profile (Grobman, 2009; Webb et al., 2016).

Another emergent intellectual property emanating from the happy collision of these super-abilities is metacognition: the ability to think about one's own ways of knowing, remembering, and understanding. This particular ability is considered by many in the field to be an essential component of extraordinary giftedness (Cheng, 1993; Lovecky, 2011). Whether this is an essential component or an emergent byproduct of giftedness is a point for debate. Such complex and intense internal responses bring these children to internalize much of their experience, to the extent that it is at times difficult to distinguish what is imagined and what is actual (Morelock, 1997; Piechowski, 2006). Morelock (1997) described the imaginal products of the exceptional and profoundly gifted "as complex clusters of diverse concepts, both real and mythological, joined together logically and applied to a problem of interest" (p. A-2). She noted that these children possess a powerful drive for internal consistency that requires all parts of their conceptual structure to relate to one another in a logical way.

These students' need for logical precision may lead them to incorporate precise quantitative measures and plausible arguments to successfully defend their imaginal constructs. Due to this emergent property of the "logical imperative," these children are known to correct errors, be persistently argumentative, and demand an exactitude of thought that sets them apart from their peers (Kline & Meckstroth, 1985). These children also demonstrate a fierce independence in their thinking and incredible confidence in their own opinions at an early age

(Grobman, 2009). When misunderstood, these behaviors may be quite unwelcome in the classroom where they are easily perceived as belligerence.

The Emotional Experience of the Gifted

The imperative portion of this emergent property is driven in part by the strong emotional valence and resulting attachment these children feel with the subjects they mentally engage. Indeed, neuroscientists Eide and Eide (2006) noted that gifted children as a whole tend to be especially good at using memory of personal experiences to encode newly encountered patterns, which means that in a very real sense they "love their ideas." These children form significant emotional attachments, rich with deep feeling and personal meaning, to their opinions and conceptualizations.

The exceptionally gifted are known for their strong, emotionally infused intolerance of perceived or real injustice; they possess a deep and unusually developed moral insight and reasoning ability as applied to pondering the meaning of life and death, religion and its practices, and their own personal philosophies (Gross, 1993; Hollingworth, 1942; Schuler, 2011). Silverman (2019) concluded via her 35 years of gifted research that "the higher the child's IQ, the earlier the moral concerns develop and the more profound effect they have on the child" (Moral Sensitivity and the Gifted section, para. 7).

Morelock (1992) called attention to an important research link in which cognitive complexity is connected to a wide range of emotional responses. The number and variety of emotions experienced by an individual seems to indicate a highly organized awareness, predictably governed by an impressive system of values, beliefs, and mandates. Roeper (2009; Roeper & Higgins, 2007) underscored the premise that emotions of the gifted also grow out of their greater cognitive awareness and are the key to motivation. She believed it is in the emotional realm that the gifted differ most from others. This is especially true of the most highly gifted. She noted that these children overflow with emotion, passion, and enthusiasm, at times exhausting others with their emotionality.

The Purpose of Pain

This remarkable range, depth, and intensity of emotion can lead others to mistake such profound sensitivity for the severely dysregulated emotions commonly associated with mental illness (Webb et al., 2016). Mahoney (1994) noted that the extremely gifted may share characteristics consistent with diagnoses involving

atypical emotional profiles. As a result, giftedness may mimic conditions such as borderline personality disorder, bipolar disorder, ADHD, depression, anxiety, and some forms of autism. Grobman (2009) argued it is critical that the professional distinguish between the symptoms of a highly gifted person in crisis and the symptoms of a person with a true disorder.

Experts in this field note that existential depression often emerges in highly gifted individuals and may arise from a combination of metacognition, idealism, intensity, and sensitivity (Webb, 2011; Webb et al., 2016). Kline and Meckstroth (1985) noted that meanings ascribed to personal events are defining forces in the life of an exceptionally gifted child. If a child's assigned meanings and relationships to existential and moral issues are misunderstood or unaddressed, a child's unmet needs or traumatic experiences may be compounded. This can plant seeds for larger negative impact on their functioning, sometimes devolving into deeper clinical depression and suicide (Bachtel, 2019; National Research Council, 2002; Webb et al., 2016). In fact, research on a related concept, moral injury, confirms that unaddressed existential issues—rife with guilt and shame—can impair the capacity for trust and elevate despair, suicidality, and interpersonal violence (Shay, 2014). This concept merits inclusion here, as it has emerged as a useful focus in the treatment of adults and children with trauma and existential crises (Griffin et al., 2019; Molendijk, 2018; Sugrue & Haight, 2017). The nature and interplay of traumatic experiences, moral injury, and existential depression merit further exploration, especially as they relate to this exceptionally gifted population, in light of their frequent cooccurrence, the advanced cognitive abilities of the group, and the dearth of available research (Lovecky, 2011; Webb et al., 2016).

Silverman (2019) agreed that advanced moral reasoning and moral sensitivity appear to increase with higher intelligence. She reminded practitioners that these traits also have the potential to serve as a societal strength. However, Silverman challenged the notion that existential crises automatically mean maladjustment, as the gifted child's higher value differences become a problem chiefly when encompassed by a culture of moral insensitivity. Moreover, negative emotions resulting from these types of existential crises can propel gifted individuals toward advanced psychological development (Mendaglio, 2008). They are thus "essential companions" for those who choose to remain on a life path of Kazimierz Dabrowski's transformation from selfishness to altruism.

Understanding More

Apparent in the early years of school, multipotentiality emerged as a consistent trait of this population in a long-term outcome study (Gross, 2006).

Grobman (2006, 2009) also reported its impact in his treatment of exceptionally and profoundly gifted young patients. He observed that conflicts and anxieties about each patient's "remarkable endowment" were powerful contributors to their underachievement and self-destructive behavior. He noted that his patients experienced their own giftedness simultaneously as an asset and a deficit, which bewildered them. He also reported great inner disturbance among his clients by another unique emergent quality of extreme giftedness: extracognition. That is, many of his clients had unusual sensations, perceptions, and observations that took the form of properties such as clairvoyance, synesthesia, and what Morelock (1995) termed "spontaneous knowing." Grobman (2006, 2009) noted that his exceptionally gifted patients were able to move forward, for example, when they came to embrace both their superior intellect and their striking intuition, allowing the two to support one another.

Relational Difference That Makes a Difference

One would not expect that counselors, above all others, would be included in the ranks of those who at times misunderstand exceptionally or profoundly gifted children, resulting in neglect of their needs or the misdirection of appropriate educational resources. And yet, good science and a wealth of experience with the exceptionally gifted report otherwise. In an analysis, Wood (2010) related that half of the gifted students surveyed felt misunderstood or that their concerns were dismissed. Asynchrony was identified as the area least understood by their counselor; moreover, participants stated that they did not experience having their personal philosophy or values as a focus in counseling. Wood (2010) stated the critical need to note that a child's inability to articulate these parts of self may be a significant contributor. Effective school counselors therefore must explore, build, and replenish a thorough knowledge base and accurate understanding of the traits and characteristics associated with the exceptionally gifted, beginning with this chapter and exploring beyond.

It has been the experience of these authors and many others who work with the exceptionally and profoundly gifted that a rich working relationship is readily forged with an egalitarian approach—that is, a collaborative therapeutic alliance between equals (Grobman, 2009; Jackson & Moyle, 2009; Morelock, 1997). Given this special population's considerably advanced intellect, the multiple factors consistently placing them in vulnerable positions in educational and social systems, and their deep need for unusually rich, nontraditional, and transparent

dialogue, the egalitarian mindset fits well as a means of building and maintaining rapport (Ellsworth, 1999; Scofield et al., 2009).

Acceleration Avoidance

Research highlights another unfortunate truth associated with the unique needs of the exceptionally and profoundly gifted. Wood et al. (2010) found that counselors unknowingly misguided gifted students when considering acceleration practices. School counselors are solicited by parents and administration alike to provide expertise in acceleration without any formal training. This results in well-meaning practitioners passing on erroneous information (e.g., from informal hall conversations and sound bites from workshops), which then reinforces false information to districts and subsequently researchers regarding what works. Specifically, Wood et al. (2010) found that school counselors are hesitant to recommend particular options for advancement, such as early kindergarten entrance or grade-skipping, likely due to their fears of negative social-emotional impact on children. However, the research clearly and consistently states otherwise (Colangelo et al., 2004; Gross, 2006). Radical acceleration shows extremely positive academic, career, and relational outcomes (Jung & Gross, 2014). The array of options that constitute radical acceleration include early school entry, subject matter acceleration, grade-skipping, dual enrollment, special courses, mentors, Advanced Placement, exams for college credit, and early college entry (Jung & Gross, 2015). With a child whose natural pace of learning is accelerated, the question is not whether, but how the curriculum should be accelerated to match the child's natural pace of learning.

It is critical that administrators also provide school counselors access to the thorough training needed to properly assess acceleration strategies as well as information regarding the myriad supports and resources available to students (VanTassel-Baska & Baska, 1993; Wright & Wright, 2014). Current information on district practices, acceleration policies, and resources must be regularly maintained in order to advocate for children effectively (Wood et al., 2010). Viable, carefully researched resources might include mentors, university or online courses, enrichment opportunities, organizations, books, periodicals, and financial support (Webb et al., 2016).

It is important to note in the framework we are developing here—which was conceived in earlier writings (Morelock, 1992, 1996)—that talent is defined as being separate from giftedness. However, talent development is recognized as a vital component of meeting the needs of the gifted child (Henshon, 2009). Tolan (1990) echoed these principles of intervention for the exceptionally and

profoundly gifted and emphasized that it is imperative that the child's strong internal drive to develop their abilities is not thwarted, as this often leads to crippling emotional damage. Interestingly, Gross (2006) found a disturbing trend in actual experiences of those children who were radically accelerated: Their talent development was not governed so much by their own passion or strongest talent area, but by their school's academic preferences and the teacher's willingness level. Scala (2001) shared her salient case study outlining several key shifts that her school made to effectively meet the unique needs of a profoundly gifted elementary school child who was already exhibiting symptoms of depression. One innovation that led to the child's successful reengagement in learning was the validation and use of the child's own persevering and intense enthusiasm for science.

When Complexity Increases

Going the distance to explore, identify, understand, and relate to exceptionally gifted children as truly unique individuals is an effective way to address unmet needs (Webb et al., 2016). Research confirms that the positive influences in a child's social, educational, and affective environments must all work together with good physical and mental health in order for gifted children to ultimately fulfill their potential (Vaivre-Douret, 2011). However, children often frequent the office of school counselors due to the multiple negative influences arising from crises (Laundy, 2015). Interventions and collaborations within preexisting federal and state educational structures sometimes prove insufficient to meet a more complex child's needs in increasingly complicated situations. In recent U.S. history, community crises include abrupt federal changes in special education policy, school shootings, increases in suicide attempts and completions, and most recently a worldwide pandemic (Centers for Disease Control and Prevention, 2021; Curin & Heron, 2019; Lichtman, 2016, 2017; Marjory Stoneman Douglas High School Public Safety Commission, 2019; Plemmons et al., 2018; Sandy Hook Advisory Commission, 2015). Personal crises in the life of a child prove to be negative influencers as well and include events such as the death of a family member, parental divorce, military deployment, medical emergency, or significant illness (Laundy, 2015).

Whether a singular crisis or waves of crises disrupt the environment of a child, family, school, or country, savvy practitioners must adapt and embrace innovation (Gross, 2004; Laundy, 2015; Wallace-Hulecki, 2017). A school's ongoing incorporation of best practices can promote future resilience and reduce a gifted child's overall stress load when crises do occur (Laundy, 2015; Roeper, 2009). As an example, stakeholders and practitioners have recommended reforms to pre-

vent and mediate the impact of violence in a school setting (Marjory Stoneman Douglas Public Safety Commission, 2019; Sandy Hook Advisory Commission, 2015). Reported preventive practices include the very early identification and assessment of vulnerable youth, universal social-emotional learning in the K–12 curriculum, effective mental health and educational service delivery, holistic integration of physical and mental health services across a child's lifespan, and cross-system communication among professionals charged with their care.

School counselors are also encouraged to consider adding an additional support structure when levels of complexity rise: school-based collaborative mental health teams. These teams emerged over a period of years as a collective work-product of stakeholders and practitioners associated with the Sandy Hook Elementary School shooting (Laundy, 2015). For example, Laundy (2015) suggested two different approaches, which transcend the traditional limits of the practices and policies of Individualized Education Program (IEP) and 504 plan structures: Include more professionals in the treatment team and capture more robust histories of the individual and family systems. Laundy's Longitudinal Overview of Growth in Systems model (L.O.G.S.) embraces significant shifts from typical practice, which extend the frames of reference for understanding multiple interrelated problems while also expanding access for potential points of intervention. This approach has the capacity to increase the depth and complexity of assessment and response to the unique needs of exceptionally gifted children in increasingly complex and vulnerable environments. Indeed, more is different when it comes to a school counselor's response to a complex child in an increasingly complex world.

Philosophical Rootedness

It comes as no surprise that this critical feedback, emphasizing new ways of thinking about the inherent, dynamic complexity of these children, as well as the manner in which to engage them, brings the counselor of the gifted back to a pioneer of gifted education and humanistic psychology: Leta Hollingworth. The long-term influence of Hollingworth's research on gifted children and the nontraditional child-centered educational approach that she modeled are well recognized; however, the impact of her values on counseling this complex population is no less profound (Delisle, 2018; Hollingworth, 1926; Kerr, 1990). She firmly believed that science should serve humanity and has the potential to create equality for talented children of all backgrounds. She consistently held the uniqueness of each individual in high esteem and challenged colleagues who focused solely on their subject's statistical value to "take pains" to interact in full with the children

they were studying (Kerr, 1990, p. 179). She formed such rich, authentic relationships with these children that many of her students continued to write to her for years to follow (Hollingworth, 1942).

As research-informed school counselors seek to authentically engage the exquisite uniqueness of the exceptionally and profoundly gifted child, it is the hope of the authors that they would indeed "take pains." As Morelock (1997) reminded those in frequent or constant community with these individuals:

> The complexity and depths of these children's understanding and the uniqueness of their individual phenomenological experiences may be strikingly different from anything for which our background may have prepared us. Unless we go gently with these children, approaching them without judgment, with openness to whatever we may learn from a variety of sources, we may come away without ever really knowing who they are. (p. 15)

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CHAPTER 16

Twice-Exceptional Students

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Twice-exceptionality (2e) is a relatively new term to educators. It refers to an individual who is highly able/gifted and has a disability, thus having not one exceptionality, but two, on opposite ends of the educational spectrum. Baum and colleagues (2017) described it beautifully in *To Be Gifted and Learning Disabled*: "A 2e individual is neither gifted (think yellow) nor disabled (think blue)—rather he or she is the dynamic interaction of both (think green)" (p. 50). Twice-exceptional learners are each one-of-a-kind fusions of their individual strengths and struggles that makes them their own beautiful shade of "green." It is the job of educators to understand, accept, and teach the world how to understand and accept them exactly as they are.

In an effort to help educators recognize twice-exceptional learners and the subsequent required referrals, Silverman and colleagues (2019) created a checklist of common characteristics of 2e learners. Some items on the checklist include:

- Appears smarter than grades or test scores suggest.
- Does well when given sufficient time, but performs poorly on timed tests and takes much longer to complete assignments and homework than other students.
- Has wonderful ideas, but has difficulty organizing tasks and activities.
- Has a great (sometimes bizarre) sense of humor and may use it to distract the class. (p. 1)

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Twice-exceptional learners are the kids who do not fit into any one box. They surprise others with the questions they ask, the insightful thoughts that seem to come out of nowhere, or how much they know about odd topics, but they do not always perform well in class or on tests. They may appear to be average students, but they have internal emotional struggle. They may know more than any other student about snakes, but they cannot put more than five words down on paper in 30 minutes. They may have a million questions and ask them while bouncing around the room. They may be verbally advanced and have a fantastic memory, but their teachers say they are lazy. They are in a category all their own, not quite fitting in with their gifted peers, but also not fitting in with the students receiving special education services in their grade. They are unique and need counselors and educators on their side.

What Is Twice-Exceptionality?

The most comprehensive definition of twice-exceptionality was compiled by Reis et al. (2014):

> Twice-exceptional learners are students who demonstrate the potential for high achievement or creative productivity in one or more domains such as math, science, technology, the social arts, the visual, spatial, or performing arts or other areas of human productivity AND who manifest one or more disabilities as defined by federal or state eligibility criteria. These disabilities include specific learning disabilities; speech and language disorders; emotional/behavioral disorders; physical disabilities; Autism Spectrum Disorders (ASD); or other health impairments, such as Attention Deficit/Hyperactivity Disorder (ADHD). These disabilities and high abilities combine to produce a unique population of students who may fail to demonstrate either high academic performance or specific disabilities. Their gifts may mask their disabilities and their disabilities may mask their gifts.
>
> Identification of twice-exceptional students requires comprehensive assessment in both the areas of giftedness and disabilities, as one does not preclude the other. Identification, when possible, should be conducted by professionals from both disciplines and when at all possible, by those with knowledge about twice-exceptionality in order to address the impact of

> co-incidence/co-morbidity of both areas on diagnostic assessments and eligibility requirements for services. Educational services must identify and serve both the high achievement potential and the academic and social-emotional deficits of this population of students. Twice-exceptional students require differentiated instruction, curricular and instructional accommodations and/or modifications, direct services, specialized instruction, acceleration options, and opportunities for talent development that incorporate the effects of their dual diagnosis. (pp. 222–223)

The state, district, and school an educator works in will determine how gifted identification is determined. Regardless of how each state defines giftedness, these learners can have high cognitive ability; be highly creative; excel in school subjects (e.g., math, reading, technology); be creative producers who excel in STEM, art, or music; or be the next Olympic swimmers. No matter what their gift or talent is, it must be the focus despite and because of their disability. These learners need to find out what their natural talents are and work on making that their North Star. A system that tends to look for deficits alone can extinguish a student's spark and passion for learning.

The following sections review the most common and researched disabilities found in the twice-exceptional population: Attention Deficit/Hyperactivity Disorder (ADHD), specific learning disabilities (SLD), and autism spectrum disorder (ASD). These three are not the only exceptionalities. Twice-exceptional learners can also be gifted individuals with visual, auditory, or physical disabilities; emotional disturbance; anxiety disorders; speech or language impairment; bipolar disorder; traumatic brain injury; or any other disability recognized by the Individuals With Disabilities Education Act (IDEA, 1990).

Attention Deficit/Hyperactivity Disorder

According to the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-5*; American Psychiatric Association, 2013), ADHD is characterized by patterns of inattention and/or hyperactivity-impulsivity that last for more than 6 months, take place in more than one environment (i.e., home and school), are inappropriate for the developmental level of the child, and interfere with the child's quality of life. The full diagnostic criteria for ADHD can be found in the *DSM-5* (APA, 2013) and include (a) inattentive symptoms (e.g., makes careless mistake, has difficulty staying focused, appears to not be listening, loses things, is

easily distracted, and has trouble organizing things or tasks) and/or (b) hyperactive/impulsive symptoms (e.g., fidgets, squirms, has trouble staying seated, interrupts, talks a lot, is extremely active, and has trouble being still).

Although the name *Attention Deficit/Hyperactivity Disorder* implies that students have a lack of attention and are hyperactive, the medical literature describes ADHD as a brain-based disorder that impacts executive functioning (Wilens & Spencer, 2010). Children with ADHD have differences in parts of their brain that control working memory, the ability to retain information while processing new information, goal-directed behavior, on-task behavior, focusing on one thing at a time, making decisions, controlling inhibitions, and controlling attention (maintaining and shifting/not shifting due to sensory input; Wilens & Spencer, 2010). According to Wilens and Spencer (2010), "Most individuals with ADHD have a comorbid disorder: including oppositional, conduct, anxiety, or mood disorders. In addition, ADHD carries with it significant impairment in academic, occupational, social, and intrapersonal domains necessitating treatment" (p. 9). Several studies have found that ADHD and its comorbid conditions are equally prevalent in low-, average-, and high-IQ individuals (i.e., Katusic et al., 2011).

Misdiagnosis and Missed Diagnosis

Some characteristics of giftedness can be confused as ADHD symptoms, causing misdiagnosis in gifted children, missed diagnosis in twice-exceptional children, and difficulties making a dual diagnosis in 2e children with ADHD (Mullet & Rinn, 2015). The overlapping characteristics include heightened activity of the mind, strong emotions, high energy, questioning of authority, distractibility, and hyperfocus (Lee & Olenchak, 2015; Mullet & Rinn, 2015; Webb et al., 2016). These gifted characteristics can be misconstrued as ADHD; they may be due to overexcitabilities (see Chapter 4 by Piechowski and Wells, this volume), personality traits of the highly creative, reactions to being underchallenged, asynchronous development, being the youngest in a class, or simply being a very smart kid who does not think the teacher and class are worth their attention. Counselors need to be aware of the danger of misdiagnosis of ADHD in gifted students (see Chapter 37 by Amend and Peters, this volume).

The prevalence of ADHD in the gifted population is similar to that of the general population (Mullet & Rinn, 2015). Unfortunately, some students are missed; a child with high cognitive ability can have undiagnosed ADHD due to average or above-average achievement in early grades. This may be due to the common practice of looking for lack of learning or behavior problems. A 2e child with ADHD may never show below-average achievement in elementary school, thus running the risk of being missed for diagnosis. As 2e students with ADHD

mature, school materials increase in challenge and the workload grows, making it harder and harder for these students to succeed. Their ADHD symptoms become more apparent to teachers and parents as the schoolwork becomes more strenuous, but by then secondary teachers are not on the lookout for disabilities often caught in elementary school.

Another area of missed identification for 2e students with ADHD is qualification for gifted services. Based on Mullet and Rinn's (2015) review of literature on 2e learners with ADHD, individuals who are dually diagnosed as gifted and ADHD are less likely to score in the gifted range on various IQ tests due to low processing speed and working memory. Around the United States, there are a variety of different ways children are identified for gifted services. Many states use a combination of ability tests, achievement tests, school grades, gifted behavior/characteristic checklists, and teacher recommendations (National Association for Gifted Children [NAGC] & Council of State Directors of Programs for the Gifted [CSDPG], 2015). Twice-exceptional students with ADHD can score lower on cognitive ability tests due to a variety of factors related not to their ability, but to their disability, including not having enough time to finish timed tests, slow processing speeds, or impulsivity when giving answers. ADHD can impact a student's ability to learn, leading to low grades and test scores. ADHD also makes it hard for students to keep track of their schoolwork, finish tasks on time, sit in their seats, and follow directions. These types of behaviors are not always in line with a teacher's conception of a "gifted child," causing these students to never be nominated for gifted identification. All of these behaviors stem from students' disabilities and can prevent 2e students with ADHD from being identified for gifted programming.

Social-Emotional Issues

Gifted youth with ADHD struggle with social problems, low self-concepts, low self-esteem, and a delay in social and emotional maturity. Giftedness combined with ADHD has been reported to cause an intensification of social and emotional problems, especially in 2e boys with ADHD (Foley-Nicpon et al., 2011). These students are more likely to have academic troubles, score lower on achievement tests, underachieve, repeat grades, avoid homework, and be in a special education setting as compared to their gifted peers (Mullet & Rinn, 2015). Counselors are uniquely qualified to help these students understand their gifts and disabilities, as well as build a positive self-concept.

Strengths

Looking on the brighter side, 2e individuals with ADHD demonstrate many strengths. They have more creative ability than their gifted peers, scoring higher on creativity assessments (Mullet & Rinn, 2015). The lack of impulse control and fast thinking may make 2e learners with ADHD able to generate more ideas without judging and throwing them out, thus making them creative problem solvers. They are idea generators, risk-takers, performers, problem solvers, CEOs, and comedians. Another benefit of ADHD for 2e learners is the ability to hyperfocus on a higher level thinking task, maintaining intense focus for longer periods of time (Mullet & Rinn, 2015). Counselors can help 2e students with ADHD see their traits as superpowers instead of flaws as well as help them self-advocate for tasks and roles that highlight their talents.

Specific Learning Disabilities

The next disability category that is prevalent in the gifted population is specific learning disabilities (SLD). Under IDEA (1990), SLD are disorders of understanding or using language, including reading, writing, spelling, thinking, speaking, and/or math calculations. The *DSM-5* (APA, 2013) defined SLD as having difficulty with reading, understanding what is read, spelling, written expression, understanding number concepts, facts or calculations, or reasoning, for more than 6 months and having academic skills that are substantially below what is expected for the child's age that cause problems in school.

Identification Challenges

Specific learning disabilities such as dyslexia or dysgraphia are especially challenging to identify and diagnose in gifted children because 2e learners with SLD often score on grade level in their area of difficulty, making it challenging for a classroom teacher to notice. This phenomenon is called the masking effect. For example, students with high cognitive ability can compensate by memorizing words and reasoning their way through comprehension questions instead of reading with ease. Even though they may have dyslexia, it is masked by their ability. Foley-Nicpon and colleagues (2011) reported that 2e students with dyslexia showed average reading performance, and Assouline and colleagues (2010) found that 2e students with SLD also scored in the average range on both achievement tests and on written schoolwork. In both of these cases, these students' gifts

masked their struggles. In an educational system that uses achievement and ability tests to determine disability identification, 2e students with SLD are missed: "Educators of students who appear to have high verbal ability while simultaneously demonstrating difficulty completing written assignments—and may even appear to be lazy or unmotivated—have a responsibility to further investigate the students' difficulties and strengths" (Assouline et al., 2010, p. 1). This responsibility applies to all areas. If a child's observable ability seems to not match their performance in a specific academic area (reading, math, writing), some investigating needs to occur. Some instances to look for are:

- when a child's comprehension of a story they listen to does not match their reading comprehension,
- when a child can verbalize and explain a lot about a topic but has trouble putting it into writing, and
- when a child has poor organization and/or handwriting.

Another red flag to look for is when some areas of learning are more difficult for the student than others, taking the child significantly more effort than their peers. Again, these students tend to perform on grade level, but with their intellectual ability in the superior ranges, one or more area in the average range is a discrepancy that should be investigated.

Strengths and Challenges

Even though there is no one profile for 2e students with SLD, a review of literature (Foley-Nicpon et al., 2011) revealed that these students have some defining strengths and challenges. They show strong verbal comprehension, conceptualization, and reasoning, outperforming their peers with SLD who are not 2e. Strengths of 2e students with SLD include seeing connections and understanding the big picture; they are visual problem solvers, storytellers, inventive, empathetic, artistic, and musical.

The same review of literature (Foley-Nicpon et al., 2011) reported that 2e students with SLD are characterized by weaker decoding, working memory, and processing speed. The review also shed light on the emotional turmoil of these students. Several studies reported negative school experiences, low self-efficacy, feelings of failure or worthlessness, problems with peers, or aggression (Foley-Nicpon et al., 2011). What seemed to help 2e students with SLD was participation in enrichment programs, extracurricular activities, identification and understanding of their disability, self-acceptance, self-advocacy, and support from parents (Foley-Nicpon et al., 2011).

Autism Spectrum Disorder

The last exceptionality highlighted in the gifted population is autism spectrum disorder (ASD). In the literature, individuals on the autism spectrum with an IQ of 70 or higher are classified as high-functioning ASD. Gifted students would fall into this designation, although there is not a large research base on gifted individuals with ASD. The most recent *DSM-5* removed Asperger's syndrome as a separate disorder, absorbing it under the larger umbrella of ASD (APA, 2013). The diagnostic criteria for ASD can be found in the *DSM-5*. ASD is characterized by behaviors in both areas: (a) deficits in social communication/interaction (e.g., lack of affect, trouble responding in social situations, lack of eye contact, trouble interpreting nonverbal cues, trouble making and keeping friends) and (b) restrictive, repetitive behaviors or activities (e.g., repetitive movements or speech, need for routine, sensory issues, intense and/or unusual interests; APA, 2013).

Identification Dilemmas

Individuals with high cognitive ability can have characteristics that can be misinterpreted as symptoms of ASD and vice versa; these eccentricities include an excellent memory, trouble socializing with age peers, and having odd interests. It is important that the characteristics of extremely intelligent children are not misdiagnosed as ASD (Webb et al., 2016) and that the social difficulties and rigidity of individuals with ASD are not brushed off as merely attributes of highly gifted individuals. A comprehensive evaluation is needed to determine appropriate diagnosis (Assouline et al., 2009).

One root of missed diagnosis in 2e individuals with ASD is the confusion of what ASD looks like in children who do not have a verbal communication delay. One early warning sign of ASD that pediatricians and preschool teachers are looking for is lack of or delayed speech. Twice-exceptional individuals with ASD may be highly verbal, talk early, and even have a precocious vocabulary. This factor alone (i.e., that a child is so verbally advanced) unfortunately can delay a much-needed ASD referral.

Their Shade of Green

Gifted children with ASD can have academic achievement similar to their gifted peers, unless they have poor working memory and/or processing speed, which can impact achievement negatively (Assouline et al., 2012). They may be very successful students in the right classroom environment. One area where they

struggle is with social interactions, including making and maintaining friendships, understanding personal space, recognizing social cues, understanding sarcasm, and being so honest that people think they are rude or odd. They may want to have friends but only want to talk about their own interests. They can have a large vocabulary but may not be able to explain their feelings or what is bothering them. They may not pick up on the body language of a peer who wants to end a conversation or know how to go up to a group of peers and join in a game.

Twice-exceptional individuals with ASD also may not be able to control their repetitive sounds, movements, or language. These are also called "stimming" and can come and go depending on the individual's stress level. Examples include starting every sentence with the same phrase, singing the same song over and over, or rocking back and forth. Twice-exceptional individuals with ASD also struggle with changes in routine, like a substitute teacher, a change in their seat, an assembly, missing a turn, someone not following the rules, or things not being a certain way. They can be extremely literal, concrete, rigid thinkers. Another characteristic of 2e individuals with ASD is a topic of interest or compulsion. They each tend to have something they will fixate on; it may be a topic (e.g., the Civil War), an animal (e.g., penguins), a collection (e.g., Matchbox cars), or a movie/video game. These are intense in the moment and can change or rotate. This is an area to utilize. If teachers and counselors can find a way to incorporate these students' areas of interest into activities, they can help motivate them and make connections. There is no better way to start a conversation with a student with ASD than asking about their current area of interest.

Struggles

These students experience life differently than neurotypical students do, which can cause distress and challenges both in and outside of school. A review of literature reported that 2e individuals with ASD have lower-than-average daily living skills, communication skills, and socialization skills, with socialization skills being the weakest (Doobay et al., 2014). An area of particular concern in this population is that they have social stress; as they become older they become more aware that they are different and of their lack of skills. This results in emotional concerns, such as depression, attention problems, becoming withdrawn, and difficulty adapting (Doobay et al., 2014). Twice-exceptional individuals with ASD can also have comorbid psychological and medical conditions (e.g., ADHD, obsessive-compulsive disorder, SLD, depression, oppositional defiant disorder, anxiety, allergies, asthma, digestive conditions). They often have several doctors and therapists, medications and treatments, and a family that struggles along with

them. Counselors can help parents find outside resources, clinicians, and therapists to help family home life.

Strengths

Conversely, 2e learners with ASD have a variety of strengths that they can call on to solve problems others may not be able to solve, including an incredible attention to detail and the ability to recognize patterns. They also have an exceptional memory, think logically, and can have intense focus for tasks that are related to their area of interest. Twice-exceptional individuals with ASD are known to be very honest; they will tell you the truth even without being asked and give critiques openly. These students need to see their unique characteristics as assets that can, in the right situation, be the missing piece to solving the puzzle.

Race, Culture, Giftedness, and Disabilities

A persistent problem in U.S. gifted programs and advanced classes is the underrepresentation of Black, Hispanic, and Native American students, as well as English language learners. According to the Civil Rights Data Collection for the year 2013–2014, Black and Latino learners make up 42% of students in schools that have gifted programs, but they only constitute 28% of the gifted learners. English language learners make up 11% of students, but less than 3% are in gifted programs (U.S. Department of Education, 2016). The same trend is seen in advanced courses. High schools that have high Black and Latino student populations have far fewer offerings of calculus, physics, chemistry, and algebra II (the courses often needed for college; U.S. Department of Education, 2016).

Gifted and advanced class access are not the only areas with racial and cultural disparities. Special education eligibility has both overrepresentation and underrepresentation by race, depending on the disability and race of the student. Native American and Black learners are slightly more likely to be identified as having a disability, but looking at the breakdown by disability is telling. Black learners are twice as likely as their White peers to be classified as having an emotional disturbance or an intellectual disability, and they are 1.3 times more likely to have an SLD designation than students of other ethnic-racial backgrounds (Ahram et al., 2011). White students are more likely to have an ASD designation than other students of other races, and Native American learners are 1.5 times more likely to have a SLD designation than students of other races (Ahram et al., 2011). Hispanic students are less likely than students of other races to have the designations of emotional disturbance, intellectual disability, and ASD. When

students are designated as having a disability, Black and Hispanic learners spend less time in general education classrooms than White students (U.S. Department of Education, Office of Special Education and Rehabilitative Services, & Office of Special Education Programs, 2016). In a perfect world, students from all ethnic-racial backgrounds and across all disabilities would be equally represented in gifted education programs; that they are not brings up questions as to the cause. Researchers point toward teacher recommendation bias as a one cause of underrepresentation of Black and Hispanic students to gifted programs (Ford et al., 2008; McBee, 2006) and standardized test bias as another (Ford, 2012).

There is a lack of research on Black and Hispanic 2e learners (referred to as 3e). The combination of racial bias toward students of color in the recommendation and identification of both giftedness and disability make this an especially vulnerable population that needs educators on their side (Mayes & Moore, 2016). As a counselor, it is important to understand that racial identity is an important factor for students of color that impacts how they see themselves, both in being academically gifted and in having a disability. This collision of three identities needs attention, as a student may be the only individual in their gifted program of their race and the only one who has a disability. Mayes and Moore (2016) recommend that counselors collaborate with other educators in their schools to develop culturally responsive practices to identify and serve twice-exceptional students of color and provide support for parents, students, and teachers to understand special education services. Davis and Robinson (2018) warned that students of color are all too often victims of low teacher expectations; they recommended placing these students with teachers who will believe in their strengths and potential. They also recommended that educators teach self-regulation strategies to students to help them advocate for themselves and that counselors can seek out mentors from the community to help support these 3e students (Davis & Robinson, 2018).

Identification

As mentioned earlier, there are many children who do not follow the "usual" pattern of disability in schools. It is a common misconception that a student cannot both achieve at or above grade level *and* have a learning or developmental disability. Twice-exceptional students' gifts can mask their disability, their disability can mask their ability, or each can mask the other. This is problematic for identification. Currently, many schools use the Response to Intervention (RtI) method to identify students with learning disabilities. This method relies on students performing below grade level in a particular area (e.g., reading, math, writing) to start the RtI process. Even if a student is looked at by the RtI team and an intervention

is put into place, if the student responds to the intervention, the process stops there. These students, even with a disability, run the risk of not being identified with the RtI model. In 2004, the Individuals With Disabilities Education Act (1990) changed, no longer requiring schools to conduct a comprehensive evaluation for students suspected of having a learning disability.

The current recommendation for identification of twice-exceptional students is a full comprehensive evaluation (e.g., Assouline et al., 2010; Gilman et al., 2013; Gilman & Peters, 2018) and "specialized methods of identification that consider the possible interaction of the exceptionalities" (Baldwin et al., 2015, p. 218). This full evaluation should include achievement tests and cognitive ability tests with subtests in order to determine if there is a significant discrepancy between the student's ability (IQ) and performance (achievement or grades; NAGC, 2018). There are also recommendations when using common IQ tests to determine eligibility for gifted programs (NAGC, 2018). When a student is suspected to be 2e, a discrepancy between IQ subtests can be used to determine a possible disability, but it is important to know that this discrepancy can also lower the Full Scale score. NAGC (2018) offered recommendations for using the Wechsler Intelligence Scale for Children for these situations. Lastly, a comprehensive evaluation should include any specialized instruments that psychologists would commonly give for a specific child's individual struggles (e.g., Autism Diagnostic Observation Scale [ADOS], NICHQ Vanderbilt Assessment Scale).

A counselor who believes that a student displays the characteristics of twice-exceptionality might be the only person in their school who knows what twice-exceptionality is. Counselors should take this time to not only educate the parents of the child, directing them to resources and informing them of their rights, but also inform their colleagues. This is an area that is unknown to many. If counselors are a part of the gifted identification committee and/or the child study team, they may share this chapter and spread the word and best practice.

Strength-Based Services

Gifted services, enrichment, acceleration, advanced curriculum, and Advanced Placement (AP) courses are all examples of ways that educators attempt to serve gifted students. Unfortunately, these programs or classes, although more challenging and faster paced than the typical classes and curriculum, do not necessarily focus on students' individual strengths. The best way to serve 2e students is to focus on their personal strengths (Baum et al., 2017), fuel their passions, and help them find their areas of talent. Gifted students with learning and behavior challenges make greater improvement when exposed to strength-based interventions

as compared to deficit-based services (i.e., Baum, 1988; Baum et al., 2014; Hua et al., 2014).

The first step is to find out what a 2e student likes and is good at. Baum and colleagues (2017) are proponents of personalized learning based on 2e learners' strengths, interests, and talents. At Bridges Academy, a private school for 2e learners, educators use Schader and Baum's (2016) Suite of Tools to collect information on what is great about a child as well as what makes them unique. The educators then use the information gathered to customize a learning path for each student based on their curiosities, strengths, and learning preferences. Drawing from this approach, counselors and educators can simply ask the student questions about what they like and don't like, what they feel they are best at, and what they would rather avoid doing. They can ask: If students had the opportunity to learn anything they wanted to at school, what would it be?

Next, as often as possible, students should be given the opportunity to have learning experiences that match their strengths and preferences for learning. Zentall and colleagues (2001) found that 2e elementary students with ADHD preferred hands-on, interactive, verbal tasks they had a choice in. Counselors can help 2e high school students choose to take AP Biology, sign their middle school 2e students up for a math competition, or communicate with their elementary school 2e students' teacher that these students may learn best from audiobooks and prefer creating podcasts to show what they know. Twice-exceptional students have the added stress of a disability as they go through each school day. Imagine a group of students climbing the same mountain, but the students with disabilities have a boulder strapped to their back; they need a little extra motivation to get to the top with all of that extra weight. These students do best when doing what they like to do, learning what they find interesting, and producing products that excite them.

Need-Based Services

According to Reis et al. (2014):

> Twice-exceptional students require an individual education plan (IEP) or a 504 accommodation plan with goals and strategies that enable them to achieve at a level and rate commensurate with their abilities. This comprehensive education plan must include talent development goals, as well as compensation skills and strategies to address their disabilities and their social and emotional needs. (p. 223)

The difference between an Individualized Education Program (IEP) and a 504 plan comes down to the following question: Does the student qualify for special education, or does the child's disability adversely impact performance? Because 2e students often do not have below-grade-level performance, many have trouble qualifying for an IEP.

Direct Services

An IEP includes direct special education services. Direct services can include things like time with a special education teacher for reading intervention (dyslexia) or with an occupational therapist for sensory regulation (ASD). These services vary by individual and eligibility. Direct services can also include time with a counselor or school psychologist for group or individual counseling sessions. These sessions are a great opportunity to focus on emotional support, social skills, emotional regulation, or problem solving tough situations. If a student needs services on a regular basis in order to be successful in school, counselors should communicate with their case manager and ask to be added to their IEP.

Accommodations

Both IEPs and 504 plans provide students with disability accommodations and protect their right to a free and appropriate education. Accommodations are meant to remove barriers caused by a student's disabilities. If dyslexia is a barrier to reading, accommodations that can give the student equal access to the information their peers have include the use of audiobooks, the teacher reading directions aloud, increased time on assessments, or having all worksheets printed in a dyslexia-friendly font. Accommodations do not change what the student is learning, but how they interact with the classroom environment, teacher, and curriculum.

Accommodations need to be specific to each child and the barriers they are currently experiencing, not the disability. The IEP or 504 team needs to include many people who come into contact with that child on a daily basis to communicate what the problem areas are. Accommodations should be updated at least each school year. Twice-exceptional students can be successful in advanced, honors, and AP courses if the appropriate accommodations are in place. The IEP or 504 team can consider the following categories: presentation of material, classroom setting, student response, and timing. See example accommodations for a 2e student with ADHD and ASD in Table 16.1. There are accommodations that

Table 16.1
Accommodation Example for a Student Diagnosed as Twice-Exceptional With ADHD and ASD

Accommodations for Andrew W. (Grade 2)	
• For writing assignments, the student will have access to Chromebook, speech-to-text devices, spell check, and the use of technology. • Dictate written responses when appropriate. • For assessments, allow dictated responses, provide breaks, and allow a separate setting as needed. • Prepare student for changes in routine and new situations/transitions. • Provide a quiet environment as needed. • Provide a visual schedule for routines. • Provide clear expectations. • Teacher will cue transitions. • Provide motor breaks. • Break tasks down into their component parts. • Check for understanding of directions and tasks. Check work in progress. • Provide clear expectations for assignments.	• Use common language for behavior expectations in all classes. • Use frequent adult monitoring. • Give frequent behavior-specific praise. • Allow frequent breaks. • Give wait time. Provide wait time for answers. • Allow for small-group/individual instruction as needed. • Allow use of a timer. • Use one-step directions. • Provide redirection as needed through a close proximity check-in. • Prompt him to eat an extra snack in the afternoon. • Allow for flexibility in seating. • Allow extra time for assignments and assessments as needed. • Provide choice and options when appropriate. • Provide frequent home/school communication.

fall into each category; the student struggles with executive function, attention, writing, and sensory overload. Each accommodation is meant to lighten the burden of the disabilities and put the student on an equal footing with their peers. Counselors may be aware of things that bother the student that other teachers may not be aware of and should not hesitate to recommend an accommodation to help a student succeed.

Role of the Counselor

One of the most important roles a counselor can have is being the link between students, parents, teachers, administrators, and school staff. As a child goes from room to room and grade to grade, counselors can help form a common understanding and keep the lines of communication open. Often, in a large

school, the classroom teachers are focused on academics and making sure every child is meeting grade-level expectations, the special education teacher is focused on providing special education services and writing/amending/communicating what accommodations are in IEPs and 504s, the gifted teacher is focused on pulling out students for gifted services, and the cafeteria workers are focused on making and serving food. Each member of the team has a role to play, but none can see the whole pictures as counselors can. Not all staff are able to empathize with invisible disabilities, especially when these children are often so outwardly precocious. Counselors can educate other staff, provide consistency to the students and parents from year to year, and stay updated on changes at home. They can provide a safe place to go when a child does not feel understood by their peers or their teachers.

An important area for success in school for a 2e child is their social and emotional well-being. Unfortunately, classroom teachers are not well prepared to focus on the individual needs of this unique population. Twice-exceptional students need counseling in the areas of friends, self-critical behaviors, executive function skills (e.g., time management, goal setting, emotional regulation, planning, organization), self-awareness (e.g., strengths and struggles), and self-advocacy. In middle school they will need help deciding what advanced classes to take and what may be too much to take on. Then in high school, they will need help deciding what college program will have the right environment for them as well as understanding how to advocate for accommodation once they get to campus. The counselor's role is so important and can vary for each phase in school.

One important thing counselors can do for 2e students is to guide their parents. Counselors can help parents understand the multiple exceptionalities of their children and the different processes in place for identification and services. Many parents are not aware of the outside services available for their children, such as occupational therapy, social skills groups, psychiatrists, psychologists, parent support groups, sibling support groups, and local gifted advocacy groups. Counselors can provide a bridge to private resources and services not provided by the school.

Go Forth and Tell the World

I have one request to counselors: Please tell every counselor, teacher, administrator, staff member, board member, PTA member, coach, assistant, secretary, plant operation staff, and student about these twice-exceptional students. Spread the word so we can find them all and make sure they all have a chance to shine.

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SECTION III

Developmental Issues

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CHAPTER 17

Counseling Asynchronous Gifted Students: A 30-Year Perspective

LINDA KREGER SILVERMAN

> And what didn't you do to bury me
> but you forgot I was a seed
> —Dinos Christianopoulos, Greek poet (1931–2020)

Disguised as cunningly as espionage agents, gifted students pass for normal. They play the game and avert exposure. The rules are "never reveal anything that will make you stand out," "act like everybody else," and "do not draw attention to yourself." The gifted excel at the art of imitation, but the cost of leading a double life is inauthenticity, self-alienation, and inner conflict (not to mention the pain of having no one to celebrate their successes). Especially where provisions for advanced students are inadequate, the gifted tend to camouflage their abilities to try to blend in with their classmates—a prescription for loneliness.

The number one coping strategy of gifted youth is invisibility (Coleman, 2012). Their adeptness at dissembling (King et al., 2019) makes mental health issues of the gifted elusive to detect. Counted among the students who are "well-adjusted" (J. R. Cross & Cross, 2015), they escape notice by teachers, counselors, and researchers. Although the incidence of mental health concerns among the gifted has not been found to be significantly different from that of the general population (Robinson & Reis, 2016), these concerns still merit attention (T. L. Cross et al., 2018). The gifted may be "differently at risk" (Peterson & Jen, 2018,

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p. 113). According to Peterson and Jen (2018), a major consideration is asynchronous development, inherent in the gifted, which has implications for social and emotional health. Asynchrony is the qualitatively different lived experience of the gifted compared to the norm, due to their advanced cognitive complexity, heightened sensitivity and intensity, uneven development, and being out-of-sync socially.

These are unprecedented times: "Today's children and youth face new and more challenging pressures that previous generations could not have imagined. Experts estimate that one in five students in school today have significant mental health problems" (Pfeiffer & Prado, 2018, p. 299). Suicide is on the rise among adolescents (T. L. Cross et al., 2018), and there are gifted teens who have taken their lives.

School counselors must deal with the increasing mental health concerns of all students, including the gifted. Students experienced trauma during the COVID-19 pandemic and witnessed police brutality that reignited the Black Lives Matter movement in 2020 that will affect them for decades. According to Gloria Ladson-Billings, "the greatest needs our students are facing are not about academics, but around their mental health—the trauma that they have experienced" (CORA Learning, 2020). Safety needs precede learning needs. Students must feel safe enough to free up mental space to learn. School counselors play a vital role in establishing safe educational environments. They are the guardians of each student's mental health. The crises of 2020 shifted counselors' role. In prior years, they may have served primarily as academic advisors. Now they have the added responsibility of helping students cope with post-traumatic stress disorder (PTSD). Gifted students are likely to be among their charges who experience PTSD, as these students have greater sensitivity, intensity, and asynchrony (Tolan, 2016). Robinson (2002) noted that their fears are like those of older nongifted children, "but they do not have the emotional control to put these insights aside and go on with their lives" (p. xvii). Undoubtedly, to be able to meet all of these responsibilities, more counselors are needed in the schools, especially counselors with expertise on the gifted.

Do Gifted Children Have Different Psychological Needs?

Gifted students face additional challenges beyond the rest of the student body. They are outsiders in a society suspicious of outsiders (Geake & Gross, 2008). Coleman (2012) maintained that "giftedness is stigmatizing" (p. 376). He developed a Stigma of Giftedness Paradigm. The gifted are "normal deviants" (p.

372), who possess characteristics outside the norms for their age, gender, ethnic group, social class, and race, including rapid learning, depth and abstractness of learning, heightened sensitivity, intense interests, and asynchronous development. Although they yearn for connection, they soon realize that when others become aware of their giftedness, they will be treated differently. To manage the information classmates have about them, they dumb down, hiding their exceptionalities to prevent ridicule and rejection. Claire Chamberlin (2020) shared a poignant example of the wrenching pain of being ostracized:

> "Stop flexing, Claire." . . . "Now go away." . . . "Seriously. Goodbye." . . .
>
> Was I showing off? Should I have concealed the class' advanced level? Downplayed what a relief and joy it is to finally meet a challenge I couldn't laugh off? Am I being inconsiderate by sharing my true feelings with my friend? Where does consideration end and self-mutilation begin? (p. 13)

The gifted often feel the need to choose between achievement and social acceptance (Gross, 1989). I am reminded of the graduate student in my Counseling the Gifted course at the University of Denver who told the class that her greatest triumph was when she became valedictorian without her cheerleading team ever suspecting she was smart—stealth giftedness masquerading as normal. Gifted individuals usually despise inauthenticity. "Be true to yourself" is a moral imperative. Yet many feel compelled to lie to their classmates to hide their performance on tests, or feign interest in things that do not interest them. In a recent study in Australia, mothers of the gifted felt inauthenticity was "an unfortunate but necessary sacrifice" (King et al., 2019, p. 195). Managing the information others have about them takes an emotional toll (e.g., such as thoughts of "I cannot show people who I really am" or "I am unacceptable").

A cross-cultural study of the social experience of gifted students confirmed the universality of Coleman's Stigma of Giftedness Paradigm (J. R. Cross et al., 2019). Gifted children and adolescents were interviewed in the United Kingdom, South Korea, Ireland, France, and culturally diverse schools in the United States. In all countries, the researchers found evidence that gifted students attempted to pass for normal. The students' coping mechanisms included not offering answers in class, not sharing grades, lying about their test performance, not letting classmates know they were in gifted programs, intentionally underperforming, attempting to show interest in topics their peers enjoy, dumbing down, and staying quiet. These students are caught between expectations of the adults in their lives to perform to the best of their abilities and the requirement of their

friends not to outshine them. When they shine, they are taunted. The stakes are high. Their families count on their excelling, but if their giftedness is discovered, they will be "disqualified from normality" (J. R. Cross et al., 2019, p. 236). Many students go underground from the pressure.

In this cross-cultural study (J. R. Cross et al., 2019), teasing and name-calling were reported frequently. Some students were teased if they did well, and even more if they failed to be the best in their class. Teasing is a form of bullying. In a study of 432 gifted eighth graders in 11 states, Peterson and Ray (2006) found that two thirds of these students experienced bullying, and more than 10% were victims of repeat bullying. Pfeiffer and Prado (2018) reported that 72% of gifted high school students were called names compared to 40% of the comparison group. Gifted students were also teased more frequently than nongifted students, which had a negative effect on self-esteem and feelings of belonging.

A skilled counselor tunes into the unsaid as well as to what is stated; an instrument used for research relies solely on what the individual is willing to disclose. Therefore, qualitative investigation is a necessary research partner to probe the inner world of the gifted. Qualitative studies have found that gifted students purposely do not reveal significant stressors in their lives:

> A common finding in those studies is important to consider here: that dangerous distress can be thoroughly hidden to avoid negatively invested adults (Jackson & Peterson, 2003), to protect a positive public image (Jackson & Peterson, 2003; Peterson, Assouline, & Jen, 2015; Peterson & Rischar, 2000), or to avoid direct conflict (Peterson, 2002). Hiding or masking distress can potentially affect gifted students' mental health, researchers' foci, and even assessments of well-being. (Peterson & Jen, 2018, p. 112)

Gifted students' resistance to communicating their concerns affects perceptions of their needs, contributing to the "narrow emphasis on academic rigor and the neglect of programming to support social and emotional development" (Peterson & Jen, 2018, p. 112).

Counseling is essential for the gifted, but the caseload of school counselors makes it hard for them to fit in students who are academically successful: "High-ability students usually do not receive attention and service from school counselors" (Jen et al., 2017, p. 339). A position statement from the American School Counselor Association (ASCA, 2019) outlines the role counselors should play in raising awareness of the characteristics of the gifted, identification, advocacy, program planning, and working with families. Unfortunately,

counselors-in-training are not required to take specialized classes and receive little information about gifted students (Colangelo & Wood, 2015). Coleman (2012) noted that the inner life and personal experience of the gifted has received sparse attention in the literature. It is hoped that through handbooks such as this one, counselors will have access to information they need to tend to silent gifted youth.

Giftedness as Asynchronous Development

In 1991, a group of graduate students, gifted program developers, authors, and psychologists gathered in Columbus, OH, for the purpose of constructing a new definition of giftedness. All had considerable experience with highly, exceptionally, and profoundly gifted children—some as professionals, some as parents, and some as both. The zeitgeist in gifted education was shifting toward measurable products, performance, achievement, and the potential for outstanding accomplishments. The Columbus Group feared that the children were being lost in the bargain, only valued for what they do instead of who they are. The group sought to plumb the depths of the interior of giftedness. What emerged was a phenomenological definition of giftedness specifying the important role of the counselor:

> Giftedness is *asynchronous development* in which advanced cognitive abilities and heightened intensity combine to create inner experiences and awareness that are qualitatively different from the norm. This asynchrony increases with higher intellectual capacity. The uniqueness of the gifted renders them particularly vulnerable and requires modifications in parenting, teaching and counseling in order for them to develop optimally. (Neville et al., 2013, p. 21)

In the decades since this definition was released, it has "taken a stronghold in the field of giftedness" (Adronaco et al., 2014, p. 269). Too often, asynchrony has been abbreviated as "uneven development." It is generally understood that the highly gifted and the twice-exceptional are asynchronous (Peterson & Moon, 2008; Pfeiffer & Prado, 2018). Not everyone grasps heightened intensity, qualitatively different experience, vulnerability, or the need for parents, teachers, and counselors to adapt to the child's asynchrony.

From the lens of asynchronous development, the pertinent question is, "What is the experience of giftedness?" instead of, "What makes the gifted student successful?" Counselors are more aware of the child's inner world than edu-

cators. Now that social and emotional learning has become infused in curriculum and instruction graduate programs, the definition of giftedness as asynchrony has more relevance than in the past.

Psychological Roots of Asynchrony

Child-centered, rather than achievement-oriented, the construct of asynchrony has a strong theoretical foundation, deeply rooted in the field of psychology. It enjoys a rich global heritage, building on the insights of Binet (1857–1911) and Terrassier (1940–) in France, Hollingworth (1886–1939) in the United States, Roeper (1910–2012) in Austria/United States, Vygotsky (1896–1934) in Russia, and Dabrowski (1902–1980) in Poland.

The story begins with Alfred Binet's conception of mental age as a means of capturing developmental differences in children who developed at a slower or faster pace than their age peers (Binet & Simon, 1907). The discrepancy between mental age and chronological age was the first measure of asynchrony. Mental age predicts level of knowledge mastered, learning rate, play interests, age of true peers, maturity of sense of humor, ethical judgment, and awareness of the world. In contrast, chronological age correlates with "emotional regulation, social skills, size and physical maturity, as well as fine and gross motor skills" (Robinson, 2008, p. 35). The more cognitive development (mental age) diverges from physical development (chronological age), the more "out-of-sync" the child feels internally, in social relations, and in relation to the school curriculum. Mental age, divided by chronological age, multiplied by 100, became the original formula for the intelligence quotient (IQ). The higher the IQ, the greater the asynchrony.

A word about the misappropriation of IQ tests: IQ scores should be understood as *minimal estimates of asynchrony*—not as maximum capability. No test can measure the totality of one's competence; therefore, IQ scores underestimate aptitude. The assumption that intelligence is "fixed" genetically was anathema to Binet. Intelligence is not a static amount of raw material that stays the same throughout life. Binet maintained that it is a continuously evolving, multifaceted, complex process, influenced by the environment, and improvable through appropriate instruction (Binet, 1909). He developed "mental orthopedics"—exercises to raise children's intelligence (White, 2000, p. 39). According to Siegler (1992), "A further irony of the strong association between Binet and the concepts of mental age and IQ was that throughout his career he emphasized qualitative differences over quantitative ones" (p. 179). What happened to this view? In America, the IQ test was used for verdicts Binet condemned as brutal and deplorable. Removed from these unethical overlays, the concept of IQ serves some useful

purposes (White, 2000), such as finding brilliant Black students (Kearney & LeBlanc, 1993).

The queen of firsts, Leta Stetter Hollingworth was the first to describe asynchrony in the gifted. The first psychologist in New York City, Hollingworth developed the first course on the psychology of giftedness, and in 1926, she wrote the first textbook on this population, *Gifted Children: Their Nature and Nurture*. Kerr (1990) described Hollingworth as the first to study the emotional and social development of the gifted, the first counselor of the gifted, and the "greatest counselor of the gifted and talented" (p. 178). Interestingly, one of Hollingworth's students was Carl Rogers, and his client-centered therapy may have been derived from Hollingworth's "child-centered therapy" (Kerr, 1990, p. 180). At its inception, the field of gifted education was more closely aligned with counseling than curriculum. Hollingworth considered the discrepancy (asynchrony) between cognitive and emotional development a special perplexity of the gifted child:

> To have the intelligence of an adult and the emotions of a child combined in a childish body is to encounter certain difficulties. It follows that (after babyhood) the younger the child, the greater the difficulties. . . . (Hollingworth, 1931, p. 13)

Hollingworth (1940) found that the further the child is from average in intelligence, the more adjustment problems occur. She wrote extensively on the isolation of profoundly gifted children (Hollingworth, 1942). In addition, she is credited with conceiving differentiated affective curriculum (Peterson & Jen, 2018). Hollingworth established the child-centered basis of gifted education: "At the core of her methodology was her deep belief in understanding the whole picture of each individual student under her care" (Gabrielli, 2020, pp. 4–5).

Russian developmental psychologist Lev Vygotsky's contributions to the construct of asynchrony were the interweaving of emotion and cognition and the effect of early language acquisition on cognitive development. Although Vygotsky died in 1934, his ideas reached the United States in the early 1960s with the translation of his book *Thought and Language* (Vygotsky, 1962). Vygotsky is recognized in education for his construct of the zone of proximal development (ZPD)—the sweet spot where meaningful learning occurs. It is not well known that ZPD was first used as a means of testing intellectual development (Meira & Lerman, 2001). Like Binet, Vygotsky believed that IQ was not necessarily innate or quantifiable, and that IQ levels could be changed through learning and instruction. His interest in this topic was stimulated by a research study he read that indicated the IQ scores of intelligent children were lowered by attending school, while those of children with low IQ scores increased.

Vygotsky (1962) posited that there is a gradual progression of the child's emotional response to abstraction, and that words begin to mediate thought as soon as children develop language. The acquisition of symbol systems radically changes perception, memory, and thought processes. It follows that children who develop language earlier than others their age think in a qualitatively different manner. Tolan (2016) contended that early reading exposes young children to information, feelings, thoughts, experiences, and the imagination of adult writers, which has a transformative effect on thought processes:

> A child who reads early and voraciously cannot be said simply to have attained a particular skill earlier than others. His life experience is different from that of other children his age who do not read. . . . The same can be said of early language acquisition, since language plays a part not only in activating cognitive abilities but also in the biological organization of the brain. (p. 103)

Gifted children develop abstract thought earlier and to a greater degree than their contemporaries (Silverman, 2013). As emotion and cognition are intertwined, the children are not always emotionally prepared for their abstract thoughts, such as "What will become of me when I die?" or "Why did I come into this world?" (Hollingworth, 1931, p. 11). As Hollingworth (1931) explained:

> Intellectually they are adolescent, but their emotional control and physical powers are still very young. Problems of right and wrong, and evil in the abstract, become troublesome for very highly gifted children. They have the awareness but not the emotional maturity to deal with their awareness (p. 12)

Kazimierz Dabrowski (1964, 1972), a Polish psychiatrist and psychologist, proposed the theory of positive disintegration (TPD). Overexcitability (OE) is one of the constructs in TPD and refers to heightened responses to stimuli in five realms: emotional, intellectual, imaginational, sensual, and psychomotor. Earlier, William James (1902) proposed the excitability of character in those who feel things with great intensity (Piechowski, 2014). Most of the original members of The Columbus Group came to the gathering directly from a training workshop on rating OEs held in Ashland, OH. "Heightened intensity" in the definition of asynchrony is a direct reference to the OEs—all of them, not just emotional OE. (See Chapter 4 by Piechowski and Wells, this volume, for a comprehensive discussion of overexcitabilities.)

Dabrowski (1972) found qualitative differences in experience to be a direct consequence of overexcitability of the nervous system:

> Each form of overexcitability points to a higher than average sensitivity of its receptors. As a result, a person endowed with different forms of overexcitability sees reality in a different, stronger, and more multisided manner. Reality for such an individual . . . affects him deeply and leaves long-lasting impressions. Enhanced excitability is thus a means for more frequent interaction and a wide range of experiencing. (p. 7)

For Piechowski (1992), intensity and the expanded field of subjective experience are intrinsic to giftedness: "This intensity . . . must be understood as a qualitatively distinct characteristic. It is not a matter of degree, but of a different quality of experiencing: vivid, absorbing, penetrating, encompassing, complex, commanding—a way of being quiveringly alive" (p. 181).

A close cousin of asynchrony is "dyssynchrony," a term coined by French psychologist of the gifted Jean-Charles Terrassier (1985). Dyssynchrony describes the psychological and social ramifications of uneven development:

> Gifted children often suffer from a lack of synchronicity in the rates of development of their intellectual, affective and motor progress, which has its effect in a number of aspects of their lives, and its results in turn produce further *psychological problems*. (Terrassier, 1985, p. 265, emphasis added)

Dyssynchrony has two tributaries: internal and social. Internal dyssynchrony is the lack of synchronicity in intellectual, psychomotor, language, and affective development. Terrassier observed that gifted boys mastered handwriting at a slower rate than reading. He also perceived a gap between intelligence and emotional maturity, although Robinson (2008) found the gifted to be more socially and emotionally mature than age peers, displaying advanced social knowledge, with only emotional regulation being less mature. Terrassier (1985) wrote that the child's "sharp intelligence provides him with anxiety-provoking information, which he is unable to process appropriately" (p. 268). More obvious than internal dyssynchrony, social dyssynchrony was defined as the discrepancy between the speed of mental development of gifted children and that of their classmates. Difficulties ensue because parents and classmates "often expect the gifted child to behave according to his age" (p. 271). For Terrassier (1985), dyssynchrony is "a

description of the actual conditions in which many gifted children develop" (p. 272).

In the process of constructing the definition of giftedness as asynchronous development, The Columbus Group thoroughly explored dyssynchrony. The group adopted the internal and social ramifications of uneven development but did not like the negative connotations of the prefix *dys*, as seen in Terrassier's use of "suffer" and "psychological problems." The Columbus Group saw the phenomenon as different, not negative. Recent research suggests that "asynchrony does not equal psychological difficulty" (King et al., 2019, p. 195). The Columbus Group expanded Terrassier's description into a definition of giftedness, adding heightened intensity, greater awareness, qualitatively different experience, vulnerability, and the requirement of modifications. Terrassier's (1985) clinical experience with gifted children in France lends support to the universality of asynchronous development.

Annemarie Roeper, born in Austria, was the youngest person to be accepted by Anna and Sigmund Freud to become a psychoanalyst, but World War II interrupted the plans. Annemarie and George Roeper founded The Roeper School in Michigan in 1941, the oldest independent school for the gifted in America. In 1978, they established *Roeper Review*, one of three major journals in the field. After they retired, the Roepers moved to California in 1983, where Annemarie opened a counseling practice, primarily with children. She developed the Annemarie Roeper Method of Qualitative Assessment (QA) as a means of identifying giftedness. Annemarie was a member of The Columbus Group; she helped shape the definition of giftedness as asynchrony.

Piechowski (1991) credited Annemarie with introducing the concept of emotional giftedness in her article "How the Gifted Cope With Their Emotions" (Roeper, 1982). She defined giftedness as "a greater awareness, a greater sensitivity, and a greater ability to understand and transform perceptions into intellectual and emotional experiences" (p. 21). She continued:

> Emotions cannot be treated separately from intellectual awareness or physical development. All three intertwine and influence each other. A gifted five-year-old does not function or think like an average ten-year-old. He does not feel like an average ten-year-old, nor does he feel like an average four- or five-year-old. Gifted children's thoughts and emotions differ from those of other children, and as a result they perceive and react to their world differently. (Roeper, 1982, p. 21)

Annemarie opposed reducing the concept of asynchrony to uneven development. To address inner development, greater awareness and sensitivity must be included (Roeper, 2013).

Lori Zinser (2016), Director of Admissions at The Roeper School, described the way Annemarie related to children:

> Annemarie's ability to listen intently . . . to what children had to say allowed them to open up, to share more about themselves, and feel completely comfortable in her presence. You could visibly tell that they felt understood and accepted by her; the interaction was quite powerful to view. Her way of listening is . . . what needs to be emulated. (p. 258)

Like Annemarie, skillful counselors enable students to feel safe enough to reveal their inner experience. When counselors incorporate asynchrony into their understanding of gifted students, they relate to children's complexity, intensity, and different quality of experiencing.

Asynchrony and Twice-Exceptionality

The twice-exceptional (2e) are poster children of asynchrony. The definition of giftedness as asynchronous development is particularly relevant for this population. The most asynchronous students are profoundly gifted with dyslexia, dysgraphia, dyscalculia, Attention Deficit/Hyperactivity Disorder (ADHD), autism, central auditory processing disorder, sensory processing disorder, visual processing deficiencies, or some combination (Silverman, 2019). Many 2e students are barred from gifted programs because of the continued reliance on Full Scale IQ scores for selection, which averages highly discrepant scores (Silverman, 2018). Grades, teacher recommendations, achievement tests, and other measures of achievement all fail to identify these students. The National Education Association reports that twice-exceptional children are frequently underidentified (Kaufman, 2018). School is often painful for 2e students.

It takes a different lens to recognize twice-exceptional children. Adults need to see the child, not just the child's performance (Silverman, 2019). Giftedness as asynchronous development provides that lens. When they learn about asynchrony, 2e learners experience a deep sense of relief (e.g., "You mean I'm not dumb?"). One teen said that discovering asynchronous development soothed years of self-doubt and guilt, giving him a sense of well-being (Gilman, 2008, p. 90).

Twice-exceptional children are at risk for mental health issues because of the degree of their asynchrony: "Gifted children with AD/HD show asynchrony in the understanding of cause and effect, as well as of consequences" (Lovecky, 2004, p. 298). Dramatic discrepancies between strengths and weaknesses can lead to frustration, embarrassment, loss of self-esteem, anxiety, depression, loss of motivation, school refusal, and even physical ailments. The number one source of frustration is handwriting. This may be a universal concern, as Terrassier (1985) observed it in gifted boys in France. Time is another major cause of distress: not enough time to finish work in school and the inordinate amount of time it takes to do homework. A third stressor is insufficiently challenging curriculum. Twice-exceptional children have fine minds that require stimulation. They can easily handle complex concepts, even if they struggle with easy tasks, such as memorizing their math facts. They should never be held back to the level of their eye-hand coordination. Children with ADHD concentrate better with more challenging, advanced work.

The counselor can intervene in this downward spiral of self-esteem by recommending to teachers that they use alternate methods of demonstrating mastery, such as assistive technology, oral exams, PowerPoint presentations, photographic essays, etc. Teachers can suggest that 2e students be allotted more time to complete classroom assignments and tests, allowed to do the most difficult math problems and to skip the easy ones, and permitted to turn in the amount of homework they were able to complete in the typical amount of time it would take the other students (with parents monitoring that they actually were working). Teachers can advocate for accelerated conceptual work. These students need challenging work at the level of their intellect with modifications for their disabilities. Most 2e children thrive when teachers accommodate their asynchronous development (Silverman, 2019). The counselor can guide parents in obtaining Section 504 plans under the Americans With Disabilities Act (1990). The 504 plan assures that the child will receive accommodations in the classroom, and it provides a paper trail to enable the student to gain accommodations on College Board examinations and in college courses.

Diversity is coming to be valued more and more in high-powered organizations. School counselors can guide 2e students to careers and internships that require their particular gifts. They can be these students' cheerleaders, helping students hold onto high aspirations and assisting them in problem solving around their weaknesses. They can help teachers, parents, and students themselves focus on strengths instead of weaknesses. They can teach students self-advocacy skills and help them practice self-advocacy and assertiveness through role-playing (Galbraith, 2018). They can create support groups of 2e students who are likely to share similar experiences and concerns: "Learning that they are not the only

ones who experience feeling misunderstood can go a long way toward helping 2e students feel less different and less alone" (Galbraith, 2018 p. 143). Galbraith recommended asking students, "What can I do to help?" (p. 142).

The most important gift the counselor can give 2e learners is a caring relationship. These students blossom when they have relationships with kind adults who appreciate them and look for ways to help them succeed (see Silverman, 2019, for a fuller treatment of 2e).

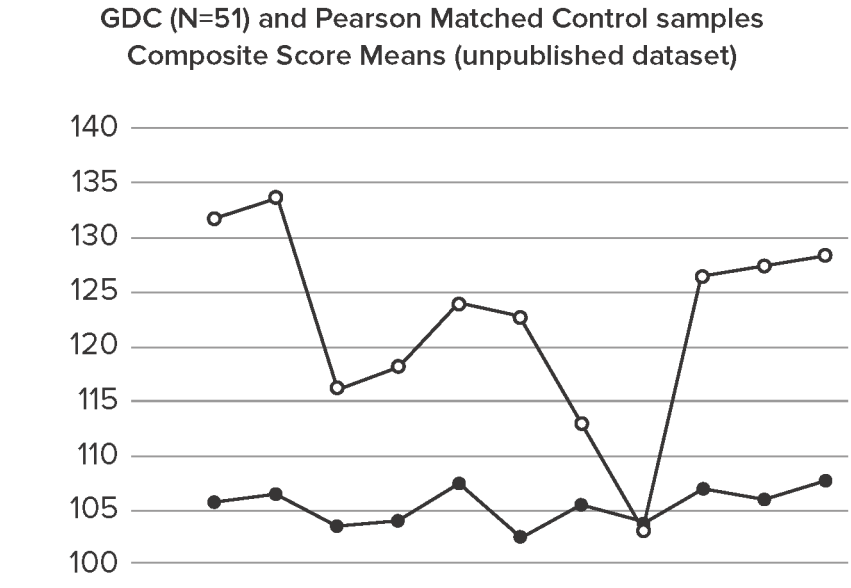
Asynchrony in the Last 30 Years

What began as a think tank evolved into a grassroots movement, and now the term *asynchrony* is ubiquitous in gifted education globally. It even appears in the *Encyclopedia Britannica* (n.d.) and the *Encyclopedia of Giftedness, Creativity, and Talent* (Kerr, 2010). In New Zealand, Cathcart (2020) found the definition of giftedness as asynchronous development useful for teachers and counselors because it makes the inner life of the gifted individual the center stone of its description; it draws attention to the unevenness of the gifted child's development; it recognizes that the more intellectually gifted a child is, the more extreme the asynchrony and the greater the impact of that asynchrony on the child's lived experiences; it emphasizes the vulnerability of the gifted child; and it explicitly states the need for modifications in teaching and counseling. The first and third empirical studies of asynchrony were conducted in Australia (Alsop, 2003; King et al., 2019).

The second empirical study of asynchrony compared composite scores of 51 gifted children assessed on the Wechsler Intelligence Scale for Children, Fifth Edition (WISC-V) at Gifted Development Center (GDC) with nongifted controls from the WISC-V normative sample who were demographically matched on age, parent education, gender, and race/ethnicity (Silverman et al., 2017). The graph in Figure 17.1 demonstrates internal asynchrony as well as significant differences between the profiles of gifted and average children. There is a 2 *SD* discrepancy between abstract verbal reasoning (the highest score) and processing speed (the lowest score), which involves two speeded visual-motor tasks, Coding and Symbol Search. Although there is a significant difference in the verbal reasoning scores between the gifted and matched controls, there is no difference between their performance on processing speed. This supports the clinical research discussed earlier that gifted children's motor coordination is highly discrepant from their reasoning abilities—more like that of others their chronological age.

The definition of giftedness as asynchrony has found a home in the literature on counseling of the gifted. It provides a foundation for counselors to under-

Figure 17.1 *WISC-V Score Comparisons: Gifted and Nongifted*



	VCI	VECI	VSI	FRI	EFI	QRI	WMI	PSI	FSIQ	GAI	EGAI
GDC mean	132.6	134.0	116.9	118.9	124.4	123.1	113.3	104.2	126.3	127.6	128.9
Control mean	105.6	106.2	104.3	104.8	107.6	103.3	105.4	104.7	106.7	105.5	106.8

Note. VCI = Verbal Comprehension Index; VECI = Verbal (Expanded Crystallized) Index; VSI = Visual Spatial Index; FRI = Fluid Reasoning Index; EFI = Expanded Fluid Index; QRI = Quantitative Reasoning Index; WMI = Working Memory Index; PSI = Processing Speed Index; FSIQ = Full Scale IQ; GAI = General Ability Index; EGAI = Expanded General Ability Index.

stand the inner lives and unique challenges of the gifted. Asynchronous development appears in most handbooks written for school counselors and psychologists about counseling gifted students (e.g., T. L. Cross & Cross, 2012; Daniels & Piechowski, 2009; Lovecky, 2004; Mendaglio & Peterson, 2007; Peterson, 2020; Pfeiffer & Prado, 2018; Silverman, 1993; Webb et al., 2016; Wood & Peterson, 2018).

When the construct of asynchrony is reduced to uneven development or being out-of-sync with peers, its full significance is lost. Researchers, then, are tempted to absorb a small part of the construct into other models, overlooking the elements that do not fit. Adronaco et al. (2014) suggested that asynchrony "represents an example of cognitive dissonance in a specific context, that of giftedness" (p. 267). Asynchrony causes discomfort that the individual is driven to

reduce: "If gifted young people have difficulty finding true peers they cannot shield themselves from dissonant views and may therefore spend a lot of time in a state of cognitive dissonance" (Adronaco et al., 2014, p. 268). The phenomenological research of King et al. (2019) is based on this perspective. Cognitive dissonance appears to be an excellent match with Coleman's (2012) Stigma of Giftedness Paradigm. However, asynchronous development encompasses more than disparate rates of development and their social implications. This portion of the construct is best described by Terrassier's (1985) dyssynchrony.

Adronaco et al. (2014) left out intensity of experience, a major facet of asynchrony, as intensity (overexcitability) purportedly was not supported by Mendaglio and Tillier (2006). Mendaglio and Tillier are both dedicated proponents of Dabrowski's theory of positive disintegration (TPD), of developmental potential, and, within that approach, of overexcitabilities. Ironically, Mendaglio and Tiller (2006) also were cited in a rancorous attack against TPD (Vuyk et al., 2016), in which the authors asserted that the construct of overexcitability should be dropped in favor of openness to experience in the Big Five model. Grant (2021) analyzed the research in the Vuyk et al. (2016) article, concluding that the research does not support the interchangeability of the two constructs. In addition, in her meta-analysis, Steenbergen-Hu (2017) assigned their research a low level of selectivity, based on weak sampling techniques. Just as the Big Five model substantiates the existence of OEs (Gallagher, 2013), Festinger's (1957) theory of cognitive dissonance lends support to the construct of asynchrony. Meaningful research maintains the integrity of a construct being investigated, rather than force-fitting it into other models that share some commonalities.

Counseling for Asynchrony

The marriage of advanced intellect and overexcitabilities creates qualitatively different lived experiences. At home, or in a gifted-friendly environment (Coleman, 2012) where the child is free to be an individual, asynchrony is not problematic. Vulnerability arises when the child is forced to fit the norms for average children, when the school environment is competitive (J. R. Cross et al., 2019), when bullying is unchecked, when there are no other gifted children to relate to, and when adults lack understanding of the child's inner world. The further the child veers from the norm, the greater the vulnerability. These conditions require modifications in parenting, teaching, and counseling. School counselors who understand the unique needs of the gifted provide differentiated counseling services for this population, dealing with issues such as peer relations, emotional adjustment, stress management, and underachievement (Reis & Moon, 2002).

They facilitate parental understanding, arrange accommodations at school, and provide direct services to gifted students to support their mental health. According to Pfeiffer and Prado (2018), "Keen awareness of the cognitive, social and emotional characteristics, unique concerns, preferences and challenges facing gifted students is critically important if one hopes to be effective in counseling the gifted student" (p. 306).

Research on bullying confirms the vulnerability of the gifted. Peterson and Ray (2006) found that the gifted were bullied to a greater extent than their peers: "An almost equal percentage of each gender were bullied more than 10 times, which suggests that both genders of gifted children are vulnerable to repeated bullying" (p. 160). Many kept the bullying to themselves, divulging it to no one. The research on bullying raises concerns about school safety and mental health of gifted children and youth. School counselors should be on the lookout for subtle forms of bullying, such as teasing and name-calling about appearance, personality, or ability. Counselors should be proactive to prevent bullying. They can conduct prevention-oriented classroom lessons on problem solving, friendship skills, making good choices, expressing feelings, organization, and career development (Peterson & Ray, 2006).

J. R. Cross and Cross (2015) provided the following guidelines for counselors of the gifted. They advised counselors to be aware that the gifted may be reluctant to seek psychological support; students can give the appearance of well-being while problems simmer beneath the surface. One of those problems is the feeling that they must hide who they are to be socially accepted, with the accompanying fear of being discovered. Their differences can cause social isolation that is harmful to their well-being. Asynchronous development can lead to unique challenges in their lived experience. It can make it difficult for peers to predict the behavior of a child with high intellect who has not yet developed emotional regulation. In addition, it can lead to anxiety when a gifted child feels powerless to resolve problems in the environment: "Is anxiety or depression the result of an inappropriate academic placement or of difficulties with interpersonal relationships brought about by one's giftedness?" (J. R. Cross & Cross, 2015, p. 168).

Schools need counselors who are credentialed to work with the gifted. Specialized counselors of the gifted help parents come to terms with the complexity of raising an asynchronous child. The child may be many developmental ages simultaneously (Lovecky, 2004). As Tolan (2016) expressed, "He may be eight (his chronological age) when riding a bicycle, 12 when playing chess, 15 when studying algebra, 10 when collecting fossils, and two when asked to share his chocolate chip cookie with his sister" (p. 102). Counselors can assist parents in recognizing their child's need for older companions with whom to play intellectually stimulating games, and younger children with whom to engage in physical

activities. Because of their emotional asynchrony, gifted children may ask their parents questions and yet not be emotionally prepared for the answers (Lovecky, 2004). Counselors can help parents cope effectively with their children's asynchrony. Counselors offer support groups where parents come together to share the kaleidoscope of common issues presented by their child's asynchronous development (Webb et al., 2007). They work with parents to develop educational plans responsive to the child's asynchrony, and they navigate the educational bureaucracy on the parents' behalf. They listen to parents and take them seriously.

The gifted require modifications in their educational programming. Gifted counselors serve as their advocates, explaining the variability of their skills to teachers and assisting staff in finding creative ways to meet their needs. They act as mediators to enable gifted students to gain access to advanced courses, subject matter, and reading materials. Twice-exceptional, underachieving, and culturally diverse gifted students may be denied access to services if the selection process for gifted programs involves grades, achievement scores, teacher recommendations, motivational aspects, Full Scale IQ scores, or an identification matrix that prizes high performance in all areas. Gifted counselors assist schools in developing gifted programs responsive to diversity that adapt to the asynchrony of the child. Programs for the gifted significantly reduce the stigma of giftedness (Coleman, 2012; Rinn & Majority, 2018).

If there is a mismatch between the teacher and the student, or the gifted child is being taunted by classmates, a gifted counselor can find another placement. They may advocate for advanced course enrollment as a better match for the student academically and socially (Barber & Wasson, 2015; Rinn & Majority, 2018). If the school climate is destructive to the child's self-esteem, as the student's advocate, the counselor may help parents find a school for the gifted child in the area or an online school. The counselor may encourage the parents to consider homeschooling.

Gifted counselors teach gifted students about asynchrony to help them gain greater self-awareness and appreciation of their strengths and uniqueness. They help gifted children find true peers who have common interests and can interact on an equal plane. They are aware of programs for the highly gifted, such as the Davidson Young Scholars Program, and initiate the process to determine the students' eligibility. They refer parents to advocacy organizations and online support groups for parents of gifted children, which not only help parents but also provide opportunities for gifted children to find true peers. They help gifted students find friends by creating support groups for them, which can help normalize the experience of asynchrony (see Peterson, 2020). Counselors provide individual counseling for gifted students who are struggling with internal or external challenges.

There is a clear need for school counselors educated and experienced in working with the gifted population.

Conclusion

Counselors are the stewards of mental health in the schools. Their guardianship extends to students of high ability. Yet the gifted continue to be underserved by school counselors (Jen et al., 2017). There is a pressing need for counselors to receive special training in working with the gifted. The issues that beset this segment of the school population are unique and need to be understood. When giftedness is characterized as high achievement, counselors may conclude that the most capable students are a low priority for counseling services. However, when giftedness is understood as asynchronous development, the need for counseling services becomes apparent.

Defining giftedness as asynchronous development is more equitable than definitions based on achievement. Recognized achievement is a function of opportunity. Programs for high achievers may be perceived as the royal pathway to success—more advantages for the advantaged. The construct of asynchrony is an antidote to accusations of elitism. Being out-of-sync is not a source of envy. Asynchrony implies greater complexity, and complexity affects all aspects of one's life, manifesting in different ways throughout the life cycle: "The construct of asynchronous development honors the inner experience as an integral component of giftedness, recognizes levels of giftedness, and allows for an understanding which transcends culturally bound conceptions of achievement" (Wells, 2017, p. 108).

Asynchrony can be positive rather than negative. The gifted should not have to feel that "something about themselves is bothersome to others" (Coleman, 2012, p. 389). They should not have to go into hiding in school. Instead, "Schools should be inclusive environments where all forms of diversity, including cognitive diversity, are celebrated" (J. R. Cross et al., 2019, p. 237). Counselors of the gifted are needed who understand asynchronous development and can help others think outside the box to meet the gifted child's needs. Then the difficulties produced by this atypical development can be circumvented. Developmental counseling is a way to prevent problems from occurring.

The construct of asynchrony offers a child-centered perspective on giftedness. These children are at serious risk for alienation if adults do not begin to recognize their unique needs in early childhood and accept their developmental differences. These children need child-centered counselors who are willing to listen to them and understand them, who appreciate their vulnerability, and who are not trying

to mold them so that they fit better into society or produce more. Gifted children need the support of school counselors who have been educated about their special needs. These personnel ensure students' emotional well-being and help them actualize their potential.

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CHAPTER 18

Identity Development and Multipotentiality

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There are a number of theoretical frameworks that examine and define identity and its development. This chapter briefly covers Erikson's (1959/1980) ego identity (e.g., psychosocial development) and discusses social identity in depth. Erikson proposed the role the identity plays in the self becoming coherent and whole. Social identity theorists describe the process and developmental aspects of defining oneself vis-à-vis the groups one considers oneself a part of. As identity development and career selection are considered to be interconnected, this chapter also considers research on multipotentiality apropos to identity development and concludes with recommendations for counseling gifted youth as they seek out, define, and refine their understanding of themselves.

A contemporary reading of Erikson is problematic, as the intellectual tradition that serves as the springboard for his theory of psychosocial development (psychoanalysis) has been criticized, in part due to its latent sexism (Roazen, 1976). Further, ethnocentrism is prominently featured within his work. These difficulties notwithstanding, Erikson is credited as a pivotal theorist due to his coherent framework for individual personality development across the lifespan, a framework that has resonated with many. Through the resolution of crises or "normative live events" (Hébert & Kelly, 2006, p. 38), children, youth, and adults achieve resolution in the crises of basic trust or mistrust, autonomy or shame/doubt, initiative or guilt, industry or inferiority, identity or identity diffusion,

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intimacy or self-absorption, generativity or stagnation, and integrity or despair/disgust (Erikson, 1959/1980). The resolution of the crises and resulting "radical change in perspective" (Erikson, 1959/1980, p. 57) leads to the development of basic virtues, including competence, will, purpose, hope, care, wisdom, and love (Cross, 2001). Identity development in adolescence is of primary importance and is the linchpin between childhood and adulthood, as the resolution of the crises in childhood serves as the foundation for the eventual development of a healthy ego identity, an identity one carries into adulthood. Erikson's emphasis on a healthy identity is also the place of departure with psychoanalysis (Roazen, 1976), as a healthy identity is one that manifests a "conscious sense of individual identity, . . . an unconscious striving for a continuity of personal character, . . . ego synthesis; [and] . . . a maintenance of an inner solidarity with a group's ideals and identity" (Erikson, 1959/1980, p. 109).

It is noteworthy that Erikson (1959/1980) acknowledged that a personal sense of self is in part due to identification with a group. Theorists exploring social identity development detail the change in the self due to identification with groups. Although there are myriad groups with which one can identify, including the gifted and talented, Deaux (2002) listed several different categories of social identities that can serve as the framework for self-definition:

- occupation or what one does for a hobby (e.g., lawyer, gardener),
- relationship with others (e.g., mother, father),
- religion and ethnicity (e.g., Catholic, Irish),
- stigmatized groups (e.g., women and men with HIV, overweight adults), and
- political affiliation (e.g., Progressive, Tea Partier).

The social identities that will serve as the focus of this chapter are ethnic identity, gender identity, and sexual orientation, as they are salient groupings within the United States (Deaux, 2002) and are places of meaningful differences in school experiences. Socialization by meaningful actors in a young person's life (i.e., parents and other family members, TV, society at large, school) plays a consequential role in gender and ethnicity identity formation, with children able to identify their ethnicity and gender at a young age (Deaux, 2002). Feeling "different" and thus questioning one's sexual orientation may potentially begin around age 5 or 6, with awareness of difference crystallizing during adolescence (Peterson & Rischar, 2004), a realization that potentially coincides with the biological and intellectual transformations that occur during puberty.

Social identities can have a bearing on cognition, or how one understands the world, motivation to carry out certain behaviors, and actual behaviors, with many cognitive, motivational, and behavioral aspects of social identity being shared by

other members in the group (Deaux, 2002). For example, there are certain beliefs held by African Americans that an individual can embrace or deny (e.g., being a Democrat, believing in fictive kinship). Once embraced, they are a lens through which events are interpreted, causing one to be emotionally tugged toward different emotions like pride, contempt, anger, or fear. One's identification with a group can also lead to behavior or behavior change.

Moreover, social identities can intersect, and people can identify with multiple groups (Deaux, 2002). The experience of being female differs based on race, and a person can choose to be defined as lesbian, Asian, daughter, neuroscientist, and woman. Researchers who adhere to Eriksonian beliefs about the self then investigate to what degree this multiplicity can coalesce into a cohesive self, while others query how well multiple identities live alongside each other or the more than additive experiences associated with different identities intersecting (Collins, 1993; Williams, 1994).

Having described social identity, I will now describe a few ways social identity can develop over time. Development can occur in several ways. As stated previously, significant actors in a child's life are powerful agents in socializing youth in appropriate behavior, beliefs, and activities, with this process beginning in the home (Deaux, 2002) and continuing in school, with friends, through media, and through work. Some researchers have proposed that development occurs in stages, with transformation in the self potentially moving from less awareness of one's self as part of a group to an eventual integration of group membership into one's sense of self in a way that bolsters self-esteem and paves the way for positive and authentic interactions with others (Deaux, 2002; Peterson & Rischar, 2004).

Long-term development in identity can also be affected by meaningful events that occur in one's life. When it comes to gender identity, puberty can be a powerful moment in a girl's or boy's life, causing the person to rethink what it means to be a male or female. As a second example, becoming a parent can cause adults to rethink their understanding of the world and of themselves (Deaux, 2002). Further, as one ages, identities can be added or dropped, resulting in a change in identity development. Adding on a career, losing a parent, or becoming divorced are all examples of this type of development. Development can also occur if attributes associated with an identity shift over time or the importance of a particular identity grows or lessens. For example, Deaux (2002) reported that the centrality of identification as Hispanic shifted over the course of the freshmen year at university for a cohort of students, with ethnic identity becoming more central for some and less central to a sense of self in others.

Finally, one's physical environment and the social milieu encapsulated within the physical environment can facilitate reevaluation of one's identity. Particularly, one's understanding of their identity and the location can become fused, resulting

in an "ecological self" or a "place identity." Change in environment can encourage revision in one's understanding of identity. If the social or physical environment shifts, the new people one turns to for support can encourage amendment of the meaning or importance of an identity. Likewise, one can make choices to be with others that help sustain an identity. For example, a recent transplant to the United States from China might seek out the closest cultural enclave where foods, people, smells, and language are once again familiar.

To summarize, then, social identity, or seeing one's self as part of a group, can influence beliefs and behaviors. People are complex beings because they identify with more than one group, and multiple identifications can blend in unique ways for singular experiences. The development of social identity over time can be stage-like and/or be subject to consequential events in one's life, including being members of social milieus, moving to an unfamiliar environment, adding or dropping identities, or moving away from/taking firmer grasp of identities. Considering that the focus of this chapter is the development of social identity in high-ability youth, the question to ask now is: How does social identity develop in this population?

Social Identity in High-Ability Youth

The scholarship exploring social identity development in race, gender, and sexual orientation for high-ability youth largely appears to be in its nascent phase (Hébert & Kelly, 2006) and may be informed by Erikson's (1959/1980) theory of identity as the establishment of a sameness or consistency that others understand and can identify. Likewise, many studies are qualitative, limiting generalizability beyond the sample utilized. Several researchers (Cross, 2001; Hébert & Kelly, 2006) have conjectured accelerated development of high-ability youth due to characteristics associated with giftedness, including pronounced sensitivity and inquisitiveness. However, little evidence supports the contention that students of high ability proceed through stages of development at a faster pace or are more sensitive than their peers of average ability to societal influences that would encourage more advanced social identity development. Instead, a theme that appears to cut across the study of development of racial identity, a gendered identity, and/or a sexual identity in high-ability students is the influence of the school setting on development. Schooling prompts youth into choices about how to best navigate intersections between race, gender, or sexual orientation and school performance, highlighting the possibility that high performance in academic domains can be a ticklish endeavor (Coleman & Cross, 2005).

Racial Identity

Researchers have questioned whether or to what degree racial identity develops in adolescence, a time period coinciding with Erikson's (1959/1980) stage of identity development. Martin and Chiodo (2004) focused their study of ethnic identity development on Latino adults due to the assumption substantiated by cited research that ethnic identity evolvement can only accurately be evaluated in adults. However, lack of development could be due to how "development" is defined. With the understanding that identities can intersect, development can be manifest in the transformation/makeup of social identities due to influence of a social setting (Deaux, 2002).

Much of the literature about students of color, high achievement or talent, and racial identity responds to the seminal work of Fordham (1996) and Ogbu (2004), cultural ecologists who sought to explain the performance of African American youth in American schools. In response to the considerable evidence that many African American students do not achieve at the same levels as their White and Asian peers, they argued that the educative experience of African American students cannot be comprehended in a vacuum (i.e., narrow focus on school and student performance in class or on standardized tests). Racism in the greater culture that serves to prescribe possibilities for the self, academic expectations, school culture, generational understandings about the import of education as based on the experience of loved ones in the workplace (Fordham, 1996), and a cultural frame of reference that is in ethical conflict with mainstream culture (i.e., oppositional cultures; Ogbu, 2004) have served as productive lenses in explaining the choices some African American youth make about emotional investment in school.

Grantham and Ford (2003) argued that this understanding for African American youth and other youth of color needs to be more fully embraced as a means of providing pathways for recruiting and maintaining youth in gifted programming. As Fordham (1996) argued, African American youth embracing high achievement may be engaged in psychological "warfare" with their peers and others, with the impetus potentially stemming from incompatibility between dual identities as scholars and African Americans.

However, the theories offered by Fordham (1996) and Ogbu (2004) are not without their detractors. For example, a study (Hemmings, 1996) that looked at African American high achievers and that also considered the role of class and differential academic cultures profiled high-achieving African American students from two types of schools: three youth from a magnet college preparatory school (60% middle class, 50% African American) and four students participating in the Program for the Academically Talented (PAT) from a school located in a pre-

dominantly working-class neighborhood (a majority of the students come from working-class backgrounds). Of the two schools, 80% of graduating seniors from the magnet school went on to college at 4-year institutions, and the school had a reputation for academic rigor. The overall gestalt of the second school was one of disaffection; the dropout rate hovered at 35%, and 25% of seniors went on for additional schooling. The experience of the students in the study varied. Across both school settings, some students were able to bring their dual identities of scholar and African American together in a way that helped them feel whole, and others were engaged in the process of reconciling these two aspects of themselves to varying degrees of success; importantly, students from the magnet school were less conflicted in seeing themselves as scholars.

Hemmings (1996) posited that social context has the potential to resolve conflicts between a personal identity (scholar) and an ethnic social identity. She noted that a schooling community known for academic rigor encourages the development of a personal identity as a scholar in most students. Flores-González (1999) argued similarly when explaining the experience of high-achieving and low-achieving Puerto Rican youth.

Lee (1994) offered a critique of the argument that voluntary and involuntary immigrants engage schooling differently, with voluntary immigrants coming to America freely and involuntary immigrants being brought to America against their will (i.e., through subjugation). According to Lee, Ogbu contended that voluntary immigrants see schooling as a pathway to success and difficulties in schooling as struggles to overcome. Ogbu used Asians as exemplars of this perspective. Lee (1994) sought to problematize such a dichotomy by arguing that Ogbu's work leaves uninterrogated the model minority stereotype, a stereotype that obscures the experience of Asian American students and potentially prevents struggling students from getting the help that they need. To develop this argument further, Lee described several Asian American identities at "Academic High": Koreans, Asians, Asian New Wavers, and Asian Americans.

As refugees to the country, Asian New Wavers were generally from poor and working-class families, had bought into the model minority stereotype, and had established an oppositional culture within school (Lee, 1994). Asian New Wavers flaunted their unwillingness to fall into the model minority stereotype and could not see engagement in school as eventuating in middle-class status. Moreover, and contradictory to the Asians and Koreans, New Wavers constructed their identity in a way that made school success diametrically opposed to an identity as a New Waver.

In contrast, and similar to several youth in Fordham's (1996) study, Asian Americans were cognizant of racism against Asians in society and used their performance in school to speak out against stereotypes against them, including

expectations about their academic performance (Lee, 1994). Although they did not believe that schooling would eliminate all complications from their lives, an identity as a scholar did not stand in opposition to their sense of self as Asian or American.

Sexual Identity

Peterson and Rischar (2004) noted that there is very little literature that explores sexuality in gifted children, and the research used for their discussion of sexual identity development in gifted youth was guided by literature about gay, lesbian, and bisexual (GLB) youth in the general population. That said, there is limited examination of sexual identity development generally, and Peterson and Rischar noted that there is little understanding of normative development of GLB sexual identity, especially in youth, and with respect to abusive and aggressive behavior from others about their sexuality. The authors relied upon two stage-like models for sexual identity development, with one model outlining a progression from awareness through developing intimate relationships with others, to revealing to others one's sexual orientation. The second model proposes progression from confusion through tolerance and acceptance, to fusion of sexual identity into one's sense of self.

With the understanding that adolescence is generally not the time when youth openly express their sexual orientation, Peterson and Rischar (2004) administered an open-ended survey to 18 self-identified as gifted youth (12 male, six female) about coming out or the time during which one's sexual orientation as GLB is integrated into one's identity and informs social interactions with others. They particularly wanted to focus on coming out in school and with family. Of the 18 students, five came out while in school, with one coming out in junior high and the remaining four waiting until high school. The rest waited until after high school. Of the sample, nine wondered about sexual orientation before having left elementary school, with five feeling that they were different from their peers in the sixth grade. Seventeen of the 18 were well aware of their feelings by 10th grade. Six students reported eventual support from parents, and 11 reported support from friends, with college being a saving grace for many.

Several themes that addressed social context were identified: differentness and feeling isolated, a feeling of danger in school as well as positive and negative experiences in school because of sexual orientation, and self-destruction and depression (Peterson & Rischar, 2004). Nine of the students accepted being GLB, and the remainder became hypervigilant in performing heterosexuality or in protecting themselves from anyone finding out. Students reported feeling pressured and afraid.

Integrating sexual orientation into a sense of self was a difficult process for the students personally and socially, with many choosing to throw themselves into academic pursuits and two considering dropping out of high school (one of the two did indeed leave school for a time but returned to graduate; Peterson & Rischar, 2004). By 10th grade, 12 of the 18 students were convinced they were GLB. Of the 12, 10 reported difficulty in school, and six reported problems at home, with sons struggling with their fathers and daughters struggling with their mothers. When it came to peers, some students attempted passing as straight, and others experienced difficulty.

The intersection between giftedness and high ability was not a salient characteristic of student comments (Peterson & Rischar, 2004). When asked to what degree their high ability or hypersensitivity influenced their experience, the students reported that their talent limited even further who they felt they could relate to, they were unsettled about choices for careers, or they worried that their academic performance made it even more difficult for others to accept their sexuality. It should be noted that none of the students talked with teachers about their feelings. One can assume that the students also avoided talking to school personnel generally, with some students noting bullying by adults in the school community and oppressive classroom climates.

Gender Identity

The discussion surrounding gender identity and development in gifted youth is robust, with contemporary literature seemingly focused on the nature of gender roles and gendered socialization of high-ability girls and boys (Rysiew et al., 1999). Continuing with the theme that schooling enables social identity development, Renold and Allan (2006) examined the intersection between high-ability achievement and the expression of femininity in three young women attending primary schools in Great Britain in the course of investigating how girls and boys feel about enacting academic success. Similar to Hemmings's (1996) study, Renold and Allan (2006) profiled identity (in this case, femininity) in differential school gestalts. Two of the young women were from Riverbank, an ethnically and socioeconomically diverse school community wherein a significant percentage of the student body struggled to meet national academic standards. The third young woman attended the less diverse Allbright (students were mostly White and mostly middle class), where students were apt to exceed national performance standards. The researchers were interested in examining the experience of females where exceptional academic achievement is considered remarkable (Riverbank) and presupposed (Allbright).

Shamilla and Nyla attended Riverbank (Renold & Allan, 2006). Shamilla was vehement in downplaying her ability and avoided describing herself as bright or clever; however, her friends were likely to describe her in this fashion. Her avoidance in admitting her ability stood in contradistinction to the meticulous attention she paid to her schoolwork. Rather than be known as one of the brightest in school, she much preferred to be "just another girl" and a member of "girly" culture, a culture preoccupied with being attractive, supportive, surrounded by friends, and, in other ways, "nice." Of the three girls of the study, she was the most popular and the one exhibiting tension between social popularity and manifesting high potential.

Nyla was not considered "nice" or "girly" (Renold & Allan, 2006). She was also not interested in taking on seemingly "masculine" characteristics. Instead, her performance of femininity was based on her faith and was supported by her family. Nyla was one of the few girls in the study to speak positively of her intellect. She was also haunted/pressured by the desire to do well. As opposed to Shamilla, who would sacrifice academic performance to please her friends, Nyla worried about disappointing her parents if she did meet or exceed familial and personal scholastic expectations. Socially, Nyla endeavored to find friendship, but to little avail. Likewise, very few of Nyla's teachers and peers valued the type of person she was striving to become—a person who was highly independent, confident, and competitive and who took great pride in her academic acumen. Her teachers would downgrade her ability as reflective of ethnic characteristics rather than her own drive and ambition, and peers called her "mad," "moody," "man-like," and "weird."

In probable dissimilarity to Riverbank, the expression of femininity was diverse in Allbright, with many girls choosing to eschew the "girly" persona, if they so desired (Renold & Allan, 2006). Libby, a student of Allbright, seemed to be able to meld a feminine persona that appealed to her peers (she was part of a very popular and select peer group) as well as an aggressive pursuit of being the best in school. She was confident and independent and also desirous of being perceived as attractive by others, with Renold and Allan (2006) describing her feat as the quintessence of "girl power." She labored at and was successful in making her effort-filled accomplishments appear "effortless," in accordance with school-wide beliefs about high ability, a practice that was a considerable source of stress. Moreover, as with Nyla, Libby's peers sought to attenuate and disparage her confidence; she was labeled "bossy," "arrogant," and "selfish," and her performance of femininity was not one many girls sought to emulate.

In these examples of students in diverse settings, it is apparent that students are not homogenous in their perception of schooling and achievement vis-à-vis identification with a racial/ethnic group, gender, or sexual orientation. The lit-

erature herein presented details of a variety of experiences when dealing with schooling and encourages adults concerned about the lives of youth to consider the multidimensionality represented in the intersections between identity, socioeconomic status, and academic culture when considering the role social identity development plays in the educational experiences of highly able youth.

Multipotentiality

Erikson (1959/1980) maintained that the search for identity is implicated in the search for a career, and he noted that it is "the inability to settle on an occupational identity which disturbs young people" (p. 97). Moreover, researchers contend that the selection of a career is of paramount importance to gifted youth (Greene, 2006). It is thus of concern if many, or even most, gifted youth seem unable to settle upon a career.

Researchers credit this indecisiveness to multipotentiality, a concept originating in career psychology studies (Rysiew et al., 1999). In this branch of scholarship, multipotentiality was defined as multiple abilities/multiple interests when choosing a career. However, crosspollination with gifted studies had some researchers equating multipotentiality with giftedness, thereby defining gifted as the ability to be highly accomplished in a variety of areas. Definitionally, progress was made in the 1990s, with researchers coming to consensus that multipotentiality should refer back to the definition from career psychology beginnings, equating multipotentiality with multiple abilities and particularly so when considering career options (Rysiew et al., 1999). Despite the consensus, researchers exploring multipotentiality in gifted youth define the construct in myriad ways but agree that common features are high interest, high ability, high motivation, and a high degree of opportunity in pursuing disparate career paths (Jung, 2013).

When choosing careers, researchers have noted that gifted youth tend to seek illustrious and high-paying work. Career choices are often conventional, conform to gender norms, and may be swayed by pressure and expectations from others (Jung, 2013). Career decision making might also be impacted by perception of (limited) options due to groups one identifies with; youth of color, youth with disabilities, and youth from sexual minorities may navigate lower self-efficacy, restrictions in educational opportunities, and less career knowledge (Jung, 2013), to name a few barriers.

Further muddying the identification of multipotentiality is the limited research exploring this construct (Rysiew et al., 1999) and career choice generally (Jung, 2013) among gifted youth. Currently, there is disagreement about the prevalence of multipotentiality amongst high-ability youth (Rysiew et al., 1999)

as well as whether multipotentiality impacts career decision making (Jung, 2013). Jung explored the cognitive components of career indecision amongst high-ability youth (Jung, 2013) and high-ability youth from low-income backgrounds (Jung & Young, 2017) to partially address these gaps, exploring the degree to which multipotentiality was influential. In the course of addressing this research aim across the two studies, the impact of perfectionism, occupational amotivation (i.e., being unmotivated to make career decisions because of an inability to discern the impact of not making career choices; Jung, 2013), occupational intention, culture, family influence, living up to one's potential, and valuing thoughts of family were also considered.

Using structural equation modeling to analyze survey data from 687 high-ability Australian adolescents, Jung (2013) did not find a significant path between multipotentiality and occupational indecision. Instead, occupational amotivation was directly related to occupational indecision as well as a significant predictor (occupational amotivation was indirectly related to occupational intention by way of occupational indecision). Multipotentiality was indirectly related to occupational amotivation through perfectionism, with multipotentiality negatively related to perfectionism and perfectionism positively related to occupational amotivation. Jung concluded that "it is therefore possible that occupational amotivation is the pivotal factor in determining whether gifted adolescents become undecided about their future occupations or careers . . ." (p. 450).

Using a similar analysis process with survey data from 917 high-ability Australian adolescents from low-income backgrounds (the full study was mixed methods), Jung and Young (2017) tested two models of career indecision. Multipotentiality was not related to career indecision in either model. Instead, the best fitting model showed that there was a negative relationship between multipotentiality and occupational amotivation and a negative relationship between living up to one's potential and occupational amotivation. Family influence indirectly impacts career decision making by way of living up to one's potential (family influence and living up to one's potential were positively related to each other), and valuing thoughts of family was directly and negatively related to occupational amotivation. In other words, for these youth, family and living up to one's potential are important precursors to career decision making and potentially preclude occupational amotivation.

Recommendations for Intervention/Support

Generally speaking, and particularly when it comes to a social identity, researchers, counselors, and educators have recognized that identification with groups that are not of the majority can make children vulnerable. Prejudice, bullying, and harassment within school settings are headwinds that pressure youth to conform and can lead to students abandoning school emotionally, psychologically, and physically. Children and youth attacked at their sense of self can be attacked at their core, with oppositional cultures being one potential byproduct of the mismatch between students and school culture (Fordham, 1996).

The ultimate drive for counselors is to safeguard children. In part, this means dealing with personal prejudices or biases counselors may have about social identities that students embrace so that they can help students from a place of authenticity. In other ways, it is about impacting the gestalt school environment where institutional racism, sexism, and homophobia, as well as lack of respect for idiosyncratic ways in which people can be unique, may be at play. Finally, it is about keeping eyes and ears open to students who may be struggling and helping them find ways to cope—either by finding the appropriate people they can talk to or offering a safe place for students to voice their questions, confusion, pain, hopes, and dreams.

Grantham and Ford (2003) offered several strategies for helping African American youth come to thrive in school that also seem appropriate for helping youth as a whole. Strategies include offering bibliotherapy to youth as a means of providing role modeling and catharsis; seeking out individual training in multicultural counseling; providing mentoring from successful students and adults; and leading/facilitating discussions about anger management, empowerment, conflict resolution, and decision making.

Turning to career decision making, a possible unintended consequence of portraying gifted youth as highly able to competently engage in disparate career aims is missing high-ability youth who have low interest in any field or who have foreclosed on a career too soon (Greene, 2006). The conversation about the career development profile of gifted students also needs to be tempered by the fact that students who are from low-income families, as well as youth who are non-White, non-male, and non-heterosexual, may have additional concerns when it comes to identifying fields of interest that map onto their abilities (Greene, 2006; Jung & Young 2017; Rysiew et al., 1999).

When considering the experience of women, students of color, and LGBTQ students, a career as a hallmark of identity might be debatable for some. For

instance, part of the premise of Fordham's (1996) study with highly able youth was ambivalence about school. These young people had internalized the deep disappointment and anger from adults in their lives who had operated under the assumption that hard work and good grades would result in satisfying careers, but were instead prevented from reaching their full potential. As well, the literature exploring socialization in gifted young women is, in part, driven by the reality that women and/or femininity are still not as welcomed in many academic domains, especially STEM areas (Rysiew et al., 1999).

Thus, choice of career involves more than assessing one's interests and talent(s) in relation to those interests. Support from people about career goals, learning about careers that might be of interest, and feeling able to pursue said careers is also important, if not more important (Jung & Young 2017; Rysiew et al., 1999). School counselors would benefit from learning of the possible selves of youth, an indicator of viable future selves to be embraced or avoided (Markus & Nurius, 1986). Possible selves are subject to the vicissitudes of day-to-day challenges and triumphs that eventually seep into a static belief about one's self or self-concept (Markus & Nurius, 1986). Likewise, youth navigate possible selves with others, such that possible selves are retained or rejected in part due to the support or censure of significant others in their life (Frazier, 2012). Gifted youth benefit from learning about a wide array of career options (Greene, 2006; Rysiew et al., 1999), and pursuit of nontraditional careers will require these students to develop a group of concerned others who speak positively of such aims and provide resources for realizing their ambitions. Moreover, gifted youth will require aid in developing concrete goals, encouragement in creating or pursuing a peer group that supports their ambitions, and assistance in reinterpreting promising and disappointing performance in critical academic domains in a way that protects self-efficacy (Oyserman et al., 2006).

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CHAPTER 19

Developmental Issues for Gifted and Creative Girls in a Changed World: Milestones and Danger Zones

Barbara A. Kerr

Counseling gifted girls can be an occasion for joy as well as apprehension. Every counselor knows a girl who blossomed into an accomplished and fulfilled woman, and every counselor also knows a girl who somehow lost her way, her goals compromised and her dreams unfulfilled. The COVID-19 pandemic introduced a changed world for all children. School went online, parents lost employment, and societies were wracked by racism and anti-immigrant movements. Gifted girls now face an uncertain future, complicating the dilemmas they have always faced in negotiating gender roles and achievement. The findings described in this chapter must be tempered with an awareness that worldwide changes may have a powerful impact on how counselors guide gifted girls.

Worrell and colleagues (2019), in a comprehensive review of the literature of gifted education, found that although many competing definitions and models of giftedness exist, common features can be found, including the importance of high ability, the developmental trajectory from childhood abilities to adult expertise and performance, and the importance of psychosocial factors. In this chapter, therefore, I will adopt the integrative giftedness definitions and talent development models that stress the developmental trajectory of cognitive abilities, but also an intersectional approach that acknowledges that biological sex interacts with all aspects of privilege. Gifted girls are defined as intellectually able girls who

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are capable of high achievement and development of expertise in one or more domains if provided with optimal educational and career opportunities.

In this chapter, I will also consider cognitive ability and creativity separately; although they are overlapping, creativity is not simply a cognitive ability but a constellation of motivational, personality, and mood states that combine with intelligence to produce creative behavior. Creatively gifted girls are defined as intellectually gifted girls who also have potential for original contributions in one or more domains. Counselors need to be aware that the personal and career development needs of creatively gifted girls may differ importantly from those of other gifted girls (Kim et al., 2013).

Gendering of Gifted Education Literature

Counselors exploring the gifted education and creativity literature will find that it is itself gendered (Kerr & Kronborg, 2015). The higher proportion of males at the highest end of the curve found in mathematics is far more fascinating to scholars than the higher proportion of gifted females in verbal ability. Despite 50 years of research in precocious reading, and the consistent finding of superior verbal abilities across a wide variety of measures for girls compared to boys in early childhood (Galsworthy et al., 2000; Halpern, 2012), studies have never been done on sex differences in this important aspect of giftedness. One aspect of the gendering of literature is the scant attention paid to verbal precocity in girls, which stands in contrast to the enormous literature on mathematical precocity in boys. As women closed the gap in many areas of STEM, interest turned overwhelmingly to narrow, specific abilities (e.g., spatial–visual rotation) where boys still held the advantage—even though these abilities were found to be highly influenced by experience and quite malleable (Uttal et al., 2013). Kerr and Gahm (2018) noted that the temptation toward essentialism—the belief that boys and girls are essentially different in abilities, personalities, and interests—is strong in gifted education. Even the concept of eminence is itself gendered because male-dominated fields such as physics, architecture, and philosophy are considered to require "genius" (Leslie et al., 2015).

Some authors asked in 2004 if the topic of gifted girls' underachievement is obsolete (Schober et al., 2004). Many seem to assume that any special guidance issues that gifted females once had—lower math and science achievement, lower self-esteem, and lower career accomplishments compared to gifted males—have been addressed and resolved. An extensive examination of the literature by Dai (2001) pointed out that there are still many questions unanswered about the development of gifted girls, and Kerr and Huffman (2018) showed how, with the

very constructs of sex and gender undergoing change from binaries to spectra, all aspects of the study of sex, gender, and ultimate talent development must be reconsidered.

Indeed, great progress has been made in some areas, such as in narrowing the math and science gap. Not only has the gender gap in math achievement scores closed among girls and boys in general (Hyde, 2005; Hyde et al., 2008), but also the once very wide gap at the highest levels of ability has narrowed significantly (Brody & Mills, 2005). Women are also entering many fields, including social sciences, health sciences, natural sciences, business, and law, in equal or greater proportions than men. Young women, however, enter and persist in the physical sciences, engineering, and computer science at much lower rates than males (National Science Foundation, 2020). Recent studies of valedictorians also show a still disturbing tendency for females to go to less prestigious colleges, to avoid physical and computer sciences, and to enter lower paying careers (York, 2008). All of the negative trends are accentuated for girls and young women who are Black, Latina, and Native American and those who come from low-income backgrounds (Liu & Waller, 2018), and the gifted education literature has not addressed the intersectional aspects of the achievement gap adequately. Therefore, the changes in girls' achievement scores have not always translated into higher aspirations and career accomplishments. Math and science abilities alone do not predict that gifted girls will go on to high-level careers in STEM despite their success in other fields. Societal attitudes toward girls' mathematical abilities have been implicated in the failure of many gifted girls to fulfill their potential in these fields.

Whereas public opinion continues to hold that innate sex differences in math abilities account for differential achievement of males and females, there has been no compelling evidence of this (Hyde et al., 2008). Interestingly, however, sex differences continue to hold a fascination for scholars. As soon as it was clear that the gap between math achievement scores for boys and girls had closed, researchers quickly turned attention to other abilities that might show differences between sexes, such as spatial-visual abilities (Tavris, 1992). The question should not be "What are the important sex differences?" but "Why are sex differences so interesting to researchers?" and "What impact does such fascination with sex differences have on the self-efficacy of gifted girls?"

It does seem to be the case that it is math-science self-efficacy that affects gifted girls' aspirations in STEM fields. This belief in one's own ability to achieve in STEM fields has been generally lower for girls than for boys. For gifted girls, this is also the case (Dai, 2001). Many reasons have been proposed for girls' lower self-efficacy in math and science, with socialization, stereotype threat (Spencer et al., 1999), and parent influence being major reasons. Jacobs (2005; Jacobs &

Eccles, 1985, 1992) followed this phenomenon for 25 years and found that even 2 decades later, mothers' beliefs about their daughters' math abilities had a strong relationship to their daughters' later career choice. When mothers believed their daughters had lower math abilities than boys, their daughters achieved less than they might have, even when they had high grades in math.

To summarize, the math achievement gap has for all intents and purposes closed—for girls in general and for gifted girls. Bright girls are entering traditionally male fields in large numbers, equaling proportions of males everywhere but in STEM fields. Nevertheless, self-efficacy continues to be a problem for gifted girls, with internalization of societal and parental attitudes affecting their progress in achieving their career goals. Finally, although girls have closed the self-esteem gap that once occurred in adolescence in most ways, a disturbing decline in physical self-esteem has been noted in the last 3 decades. Counselors still should be concerned about the special issues that gifted girls may bring into the guidance office and understand that the complexity of these issues requires that counselors understand the achievement, self-efficacy, and self-esteem of gifted girls, as well as the societal barriers to their success.

In order to help counselors develop strategies for guiding gifted girls, it is important to understand the unique characteristics of both academically gifted and creatively gifted girls. The following list of characteristics includes those that have reliably appeared in the research about bright girls throughout the last century.

Characteristics of Gifted Girls

Health and Socioeconomic Differences

Until the broadening of the definition of giftedness (Marland, 1972) in the United States, most gifted children were chosen from classes of middle-class, White children. Despite great advances since then in the identification of students from ethnic, racial, and socioeconomic minorities, these students remain underrepresented in samples of gifted students. As a result, the findings that gifted girls are healthier than average girls may be confounded by socioeconomic differences that lead to poor nutrition and less access to healthcare for many minority populations. For 4 decades in the United States, health outcomes for women from low-income backgrounds, particularly women of color, have deteriorated, from diseases such as diabetes to childbirth mortality (Fiscella & Sanders, 2016). Nevertheless, even when socioeconomic differences are held constant, intelligence has persistent, positive effects on health (Gottfredson & Deary, 2004). One can

expect, then, that most of the gifted girls and young women one meets will be healthy, although those who have grown up in poverty may not have had access to ways of developing their physical health and strengths.

Interests Similar to Gifted Boys

In addition, gifted girls' play and academic interests are more like those of gifted boys than those of average girls. This finding also traces back to Terman and Oden's (1947) earliest studies. A variety of studies, as pointed out by Signorella and Jamison (1986) in their meta-analysis, point to acceptance of masculinity and rejection of femininity as being linked to high achievement in girls. Gifted girls have continued to show strong interests in occupations that are not traditionally feminine vocations. Even with the onset of intense socialization pressures in adolescence, gifted girls today continue to be more similar to gifted boys academically and to have higher career aspirations than average girls (Kerr & Gahm, 2018).

Advanced, Rapid Learning Despite Teacher Stereotypes

Gifted girls may be precocious readers, as well as advanced in all other school subjects. Precocious reading is a complex phenomenon that seems to result from interactions of parent encouragement, interest, and self-teaching (Olson et al., 2006). Although they may have asynchronous development in terms of physical skills (e.g., finger dexterity lagging behind the ability to symbolize in writing), from early childhood onward, gifted girls' academic achievements outpace those of other children (Kerr & McKay, 2014). Lee (2002) described complexity in her study of teacher attitudes toward young gifted children; although teachers saw gifted girls as advanced learners, they attributed young girls' high achievement to hard work, and gifted boys' rapid learning to innate ability. In addition, Lee found that teachers tended to notice girls' achievement more in language and arts and boys' achievement in math and science, supporting the idea that teachers contribute to gender stereotypes of giftedness in girls.

Psychological Adjustment

Finally, the psychological adjustment of gifted girls surpasses not only that of average girls and boys, but also that of gifted boys. A wide variety of studies have persistently shown a strong relationship between intelligence and psychological resilience (Luthar et al., 2000). Neihart et al. (2016), in summarizing studies of psychological adjustment, found overall good adjustment for gifted popula-

tions, although there are unique social and emotional issues related to giftedness. Cross and Cross (2018) analyzed and described the kinds of circumstances and characteristics of gifted students that may lead to depression and suicide. Neihart and Yeo (2018) noted that although gifted children do have unique psychological issues, these do not arise from giftedness, but that giftedness adds complexity that can either enhance or interfere with healthy adjustment. Overall, their review seems to show that gifted girls are more well-adjusted than their peers, and often studies have found them to be more well-adjusted than gifted boys.

In addition, studies of gifted students show that both boys and girls have a repertoire of coping strategies that help them to adjust not only to being gifted among average students, but also to being gifted in a highly selective gifted education setting (Cross et al., 1993). The major thesis of *Smart Girls in the 21st Century* (Kerr & McKay, 2014) is that gifted women are too well-adjusted for their own good—that is, their resilience and coping capacities allow them to adjust too readily to barriers to their aspirations. That this continues to be true is supported by a report from the National Science Foundation, Division of Science Resources Statistics (2003) showing that the adjustments, compromises, and delays related to marriage and childbearing remain the most important factors in the decline of women's career achievements compared to men's in science. It seems likely, therefore, that gifted girls' and women's excellent resilience, coping abilities, and good adjustment are both a blessing and curse: These qualities permit a higher well-being while predisposing gifted women to accommodate blocks to their progress too readily. On the other hand, nobody can predict the effect of extreme environmental events on gifted girls and women's coping abilities. Sher (2020) sounded the alarm of increasing suicides with the COVID-19 pandemic and its related changes in schooling and unemployment.

Enduring Characteristics of Creatively Gifted Girls

Creativity assessments, whether tests of abilities or traits, seldom reveal any sex differences; only in adulthood are there differences in recognition of creative accomplishment (Baer & Kaufman, 2008). The developmental path of creativity in women is similar to that of other high-ability women; that is, precocity, high achievement, and high aspirations in girlhood may or may not lead to creative eminence, depending on external barriers and gatekeeping in creative professions. In addition, cultures shape the construct of creativity to fit their own values (Shao et al., 2019). These social constructions of creativity intersect with constructions of gender and other forms of privilege to determine the individual traits associated with creativity and which ideas and products will be considered as creative.

Most of what is known about creative girls comes from retrospective studies of creatively eminent women (Kerr & McKay, 2014). Individual creativity in a wide variety of studies is predicted by a complex combination of personality factors, cognitive style and abilities, relevant task domain expertise, motivation, and sociological and contextual influences.

Creatively gifted girls may be interested in any conceivable activity and occupation—as long as those activities don't involve routine, monotony, or lack of autonomy. They are unlikely to be interested in careers in clerical work, law enforcement (except perhaps as detectives), military, accounting, or careers in conventional religions, because all of these involve constant adherence to rules and obedience to authority. They are particularly attracted to the arts, sciences, and humanities, but are also found in engineering, where they are inventors; in business, where they are likely to be entrepreneurs; and in the healing professions, where they are innovators. Kerr and McKay (2013) found the most salient, modal characteristics of creative adolescents were openness to experience, artistic and scientific interests, and strong capacity for flow, as measured by psychological absorption.

In addition, the study of the personalities, interests, and values of 260 creatively gifted female adolescents (Patrick, 2010) seemed to show strong similarities to the descriptions of creative people in general in terms of focused interests, very high openness to experience, high capacity for absorption, and independent values. Interestingly, the creative adolescent females studied by Patrick (2010) had much higher levels of the personality trait agreeableness than are usually found among creative people and higher levels than those of eminent women, who are often characterized as having "thorns" (Kerr & McKay, 2014).

Enduring Qualities of Creative Girls

Openness to Experience. Openness involves active imagination, aesthetic sensitivity, attentiveness to inner feelings, preference for variety, and intellectual curiosity (Costa & McCrae, 1992). People who are open to experience tend to love learning not just about ideas, but also about people and nature. In Patrick's (2010) study, this was the highest personality trait for gifted female adolescents; girls scored even higher on this characteristic than creatively gifted boys. Studies of eminent women show that from childhood, they were avid readers and intensely interested in the world around them (Piirto, 2004).

Independence. Independence of thought and style is a characteristic observed not only of creatively eminent women but also of creative girls (Piirto, 2004; Reis, 2002). Creative girls are likely to be less conforming than purely intellectually gifted girls and are more likely to espouse opinions that are not shared by their

peers. Their independence can also be seen in their career orientations, where their preference for artistic and scientific careers differs from the more social orientation of noncreative gifted girls. As a result of their independence, creatively gifted girls may be less likely to be "too well adjusted for their own good" (Kerr, 1997, p. 93).

High Energy Levels. The tendency of creative people to be highly energetic is also characteristic of creative girls. Hypomania is the normal range rather than a pathological human trait. It is a state of high energy that is reflected in less need for sleep, a tendency to be highly enthusiastic about one's interests, and a capacity to persist for hours and days at a task that is compelling (Ivcevic & Mayer, 2006). Because this characteristic tends to be present from infancy onward, creative girls may seem intense and driven. High energy levels may be linked to extraversion in creatively gifted girls. Creatively eminent women have extraordinary rates of productivity and tend to be creative in a diversity of areas (Reis, 2002). Although the idea that creativity and madness go hand in hand has been widely debunked, gifted girls and women may be more prone than the general population to mood swings and difficulty regulating energy level.

Milestones and Danger Zones for Gifted Girls and Creative Girls

With the characteristics of intellectually gifted and creatively gifted girls in mind, it is possible to establish both developmental milestones and danger zones. Each stage of the gifted female's life manifests in both the blossoming of gifts and strengths as well as the appearance of internal and external barriers that can be danger zones.

Early Childhood

Milestones. Gifted girls tend to be precocious readers and strongly interested in verbal activities. Creatively gifted girls may show their openness to experience with intense curiosity and wide interests; they may be extremely active.

Danger Zones. Most schools are opposed to early entrance to kindergarten and even encourage holding children back, despite the lack of empirical support for social or academic benefits of "kindergarten redshirting" (Frey, 2005). In addition, misinformation about the meaning of precocious reading may lead principals to dismiss precocious reading as a sign of giftedness, when nearly all high-achieving girls and eminent women were precocious readers (Kerr & McKay,

2014). What this means for gifted girls is that it may be impossible for their needs for advanced learning to be met in school. Entering kindergarten at age 6 may mean condemnation to boredom for the remainder of a gifted girl's academic career. Counselors need to be advocates for parents who seek early admission to kindergarten for girls who are already proficient in most kindergarten skills and reading precociously. As Colangelo et al. (2004) pointed out, early admission to kindergarten may be the only option available for appropriate acceleration for gifted children, and it should be exercised.

Creatively gifted girls' openness to experience, intense curiosity, and high activity level may cause them to be misdiagnosed with Attention Deficit/Hyperactivity Disorder (ADHD). Even though a gifted girl may indeed have ADHD, it is easy to confuse the high activity level and intense curiosity of creativity with signs of this disorder. The capability of intense focus on an activity of interest allows differential diagnosis; creatively gifted girls should have this ability. As a result, counselors need to be alert to misdiagnoses that may pathologize creative behaviors in girls (Hartnett et al., 2004).

Middle Childhood

Milestones. Academically gifted girls respond to academic challenge with industriousness and high achievement. Self-esteem is high across categories. Creatively gifted girls show independence in their desire to spend time alone working on personal projects and often begin developing expertise in one or two domains of interest.

Danger Zones. Because acceleration is so seldom an option for academically gifted girls, they may be bored and unchallenged in the regular classroom. It is unlikely, however, that they will show their boredom in disruptive behaviors. Instead, gifted girls are more likely, because of their tendency toward compliance, to engage in fantasy, secretive reading, or other private ways of seeking intellectual stimulation (Kerr & McKay, 2014). Creatively gifted girls, when bored, may be more likely to act out their distress and may throw themselves even more intensely into their own at-home or online projects, neglecting schoolwork.

Counselors need to assist teachers and parents in recognizing the subtle signs of boredom found in academically gifted girls and the more open signs found in creatively gifted girls. Girls who seem preoccupied despite high achievement, or both preoccupied and underachieving, need help with getting the challenge they need. Parents of academically gifted girls may need to seek afterschool, Saturday, and summer options for their bright daughters to have the opportunity to advance at their own pace. These may also be options for creative girls, although many creative girls would be happier with the opportunity to work at their projects with

an individual mentor. Teachers need help differentiating education for these girls, providing acceleration options and in-depth study.

Middle School

Milestones. Gifted girls continue high academic performance, often qualifying for Talent Search programs and for special academic competitions and opportunities. Creatively gifted girls develop their expertise in their domain of interest, often seeking out their own mentors and using social networking, gaming, and online resources to support their interests. They, too, begin to achieve recognition for their outstanding creative performance in art, music, science, and leadership.

Danger Zones. The middle school movement has done little to help gifted girls find their way. Middle school is a danger zone in almost every way. The bullying of gifted children because of race, sexual orientation, disability, and other dimensions of difference increase, peaking in sixth grade (Espelage & King, 2018). The sexualization of adolescent girls on social media coupled with earlier onset of puberty for this generation means that gifted girls may be diverted from achievement goals as well as be victimized (Kerr & McKay, 2014). Middle schools remove gifted girls from the older girls whose friendship they enjoy and place them in classrooms where few provisions are made for gifted students. Collaborative learning models often put gifted girls in the position of being the ones to do all of the work. Educational national policies that emphasize high-stakes testing prevent gifted girls from getting the challenge they need. The overscheduling of extracurricular activities for middle-class girls and the increasing need for girls from poverty to assist with childcare and parents' work (Kurpius et al., 2005) mean that today's gifted girls may have very little time alone. Counselors need to help parents make wise choices about out-of-school activities, being careful not to overschedule or overwork girls. Middle school gifted girls may become very involved in social networking, gaming, and online activities, and this is often viewed with apprehension by parents. Research shows, however, that most girls are wise users of their computers, using social networking mainly to stay in contact with close friends and limiting their recreational use (Kerr & McKay, 2013). Overconcern and strict limiting of computer time by parents may deprive gifted girls of the only outlet they have for their curiosity and desire for rapid learning. Among talented at-risk girls in the Kerr et al. (2005) project, risky behaviors related to sex and substance use were indeed observed among gifted girls, but they tended to exist in complex interaction of external conditions, such as poverty and disrupted family relationships, and internal characteristics of impulsivity, playfulness, and defensiveness.

Because many creatively gifted girls are open to new experiences of all kinds, are less conforming, and are more playful and impulsive, they may be more vul-

nerable to risky behaviors than less creative gifted girls. By middle school, many creatively gifted girls may have already given up on school as a source of learning or satisfying relationships.

Counselors in middle schools are busy at this time, when all adolescents are rapidly changing and experimenting. It is important, nevertheless, to keep both parents and gifted girls aware of the importance of continuing academic achievement and rigorous training, of limiting extracurricular involvements to those that are most related to the girls' interests, and of the consequences of risky behaviors to long-term goals. The well-documented findings in the literature (Csikszentmihalyi, 1996) that delayed sexual intimacy is highly linked with adult accomplishment should be stressed. In addition, the finding that creatively talented adults who support themselves with their art, writing, and music have lower levels of substance use than average adults (Kerr et al., 1991) is a useful fact to be shared with creative girls. The high aspirations that for the last generation of gifted girls died in adolescence now stay alive throughout high school. Gifted girls achieve in school and aspire to high-status careers but outwardly follow the rules of their peer group.

If gifted girls keep their interest in math and science alive, and if they keep on reading and learning despite distractions, they have passed a major milestone.

Secondary School

Milestones. Gifted girls' academic achievements lead to high grades and admission to honors societies and Advanced Placement (AP) opportunities in school (Hertberg-Davis et al., 2006). They may be selected for special classes at summer academies for gifted students, governors' schools, and programs to encourage career development in STEM fields (Dixon, 2009). In addition, gifted girls are likely to shine in extracurricular activities, participating in athletics, performance, and clubs related to their interests. Their participation in athletics and achievement orientation may have served as a protective factor in allowing them to bypass the dangers of problem pregnancies, substance abuse, and eating disorders (Kurpius et al., 2005). By junior year, gifted girls are exploring colleges and universities and taking achievement tests. By senior year, they are applying for colleges and scholarships and may qualify for the most selective schools and the most competitive merit-based scholarships, such as the National Merit Scholarships. Their career plans become more focused. Finally, gifted girls generally have many friendships and are likely to have their first serious romantic relationship.

Creatively gifted girls have usually sought out or have been sought out by master teachers in their fields—music coaches, art teachers, writing instructors, and science mentors who demand high standards and provide opportunities for

the public display of the creatively gifted girls' works (Bloom, 1985). Creatively gifted girls have often received recognition beyond their school for their original work and have sought out online opportunities to share what they are working on. They may have networked with other creative young people, forming bands, working on performance projects, collaborating on scientific team projects, and creating their own organizations. They may have sought admission to magnet schools in their interest areas and may have explored postsecondary institutes, academies, and schools with specialized majors in creative areas (Dixon, 2009).

Danger Zones. The COVID-19 pandemic, the expanded violence toward Black people and immigrants in the United States, and worldwide economic depression could be considered one enormous danger zone for gifted adolescents. Gifted adolescents may have much more knowledge of these dangers. They may either fall into despair, or like Greta Thunberg and her climate strike and David Hogg and Emma Gonzalez with antigun activism, they may rise to protest and action. Counselors need to consider that gifted and creative students respond to these powerful trends with emotional complexity. Gifted girls are expected to be achieving, involved, popular, pretty, slender, and friendly with their teachers as well as receive higher grades than their male peers throughout high school. They now are faced with maintaining these expectations in the face of online instruction and isolation from their peers. They now take as many advanced mathematics classes as boys and lag only in advanced physical science courses. They are far more involved in student activities than gifted boys (Kerr & Cohn, 2001) and usually number among the most popular girls in the school with both students and teachers. There is a cost, however, that comes from trying to be everything to everybody: Gifted girls may suffer from lack of focus, overcommitment, and physical illnesses related to stress and exhaustion. Eating disorders may be particularly prevalent among gifted girls, as they strive for perfection of the body as well as academic perfection (Parker, 2000). Multipotentiality, a problem of being able to select and develop too many career options, is a problem for both gifted girls and boys, but gifted girls may suffer in particular with uncertainty about their future (Kerr & McKay, 2014). If they are good at everything, and interested in everything, how will they make a choice of a college major or future career (Greene, 2006)? How will a changed world recognize their talents?

By high school, however, some gifted girls have begun to refuse to play the game of pleasing everybody—and nonconforming, independent creative girls are likely to be among those who strike out on their own path. Some of these girls have turned their back on fashion, realizing they cannot keep up with girls who have large allowances. Some have developed creative lives and a creative community of friends at school or online. The 250 creatively gifted girls who were interviewed through Patrick's (2010) Counseling Laboratory for the Exploration

of Optimal States (CLEOS) project had developed clear interests in artistic and scientific occupations and were beginning to identify with adult women in those fields rather than with their less gifted, less creative peers. As a result, creatively gifted girls may be more isolated than other girls, particularly in rural schools where there may be few girls like themselves as potential friends. Teachers may be intimidated by them or actively dislike them for their nonconformity—particularly creative girls who are already stigmatized by other differences.

Counselors need to help gifted girls to achieve the important milestones by keeping them on track, despite upheavals in gifted girls' education and plans. If girls have superficial reasons for avoiding AP courses or refuse rigorous course options because of fears of losing their high grade point average (GPA), then counselors need to point out that the most prestigious colleges look at the rigor of a transcript as well as the overall GPA. If gifted girls are distressed by achievement test scores that are lower than they expected—and this is not uncommon (Sadker & Sadker, 1994)—then counselors need to inform them about the research on stereotype threat and the possibilities of bias in the tests, urging them to transcend the stereotypes they might hold. Even female valedictorians have been found to attend less prestigious colleges than male valedictorians (York, 2008), so counselors need to guide girls carefully to aspire to the best possible education they can get. In addition, higher education responded to the COVID-19 pandemic by going online; it is unknown how this affected or will affect gifted young women's college choices and future planning.

Gifted girls who struggle with perfectionism and trying to be everything to everybody need help slowing down and prioritizing their busy schedules based on those activities they value most highly. A strong literature base is now available to help bright young women with perfectionism, including Speirs Neumeister's (2018) conceptualization of positive and negative perfectionism and Anderson and Martin's (2018) practical applications of the research to Black girls and young women. Counselors need to work with health professionals to learn the symptoms of eating disorders, stress, and exhaustion among gifted girls, who may be quite proficient at hiding their suffering (Kurpius et al., 2005).

Finally, multipotentiality is no small problem, but the cure is the same as has been recommended throughout the research on career development of the gifted (Kerr, 1988, 1997): encouraging gifted students to make their career decisions on the basis of their deepest values rather than upon conformity or expedience. Gifted girls need adequate interest and personality assessment in order to make good career decisions. Career counseling for gifted girls should use combinations of vocational tests, personality tests, and values inventories, preferably those that are used for college students—out-of-level interest tests are appropriate for girls who are more advanced in their understanding of career development.

Creatively gifted girls may be so different from other girls by high school that they might benefit from magnet schools in the arts, sciences, and performing arts, where they can work with their peers and with staff who understand their unique personalities. Openness to experience and high energy may also result in the desire to experiment with substances and engage in risky sexual behaviors; creative girls need nonjudgmental guidance and information that will help them to make wise choices, emphasizing the importance of avoiding behaviors that could impede their creative goals. Differentiated guidance that helps creative girls to discover the "invisible ladders" in creative fields, that provides accurate assessment of their personalities and interests, and that allows them an opportunity to envision their future have been found to increase career exploration and engagement (Kerr et al., 2008).

What Lies Ahead for Gifted and Creative Young Women

The world has changed so rapidly in just the last few years that counselors cannot provide any certainty to gifted girls and young women about what lies ahead. Counselors will need to focus on their clients' strengths and coping abilities, emphasizing the need to find a sense of purpose amidst the chaotic world around them. Career counseling that helps girls to discover and act on their values may be more helpful than simply focusing on abilities and interests (Jung, 2018; Smith & Wood, 2018). This review has only covered the milestones and danger zones through adolescence, yet many of the barriers to gifted and creative women's achievement occur in college and adulthood when they encounter the "culture of romance" that engulfs young women in the search for partners rather than the search for meaning (Kerr & McKay, 2014) and when they encounter the blocks to creativity from the discrimination and sexism that still exist in the arts, sciences, and academe. Counselors can help bright girls to understand the road ahead by providing information about the pressures they will experience in college to compromise their goals and the difficulties that will need to be overcome in pursuing their dreams in a society that is still not structured to accommodate women's many roles. It is important to communicate not only these danger zones, but also confidence that girls can and will overcome these barriers. In programs for talented at-risk girls and college women, Kerr et al. (2005) provided a "Personal Map of the Future" for each client, which laid out the milestones and danger zones, as well as the allies, strengths, and resources that each young woman had to arrive at her destination. If guidance counselors serve as advocates for the potential of gifted and creative girls with parents, teachers, and the girls them-

selves, they can help bright girls attain the milestones and avoid the danger zones in the development of their talents.

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CHAPTER 20

Supporting the Emotional Well-Being of Gifted Boys

THOMAS P. HÉBERT

In my work with gifted students, I have come to understand that growing up gifted and male involves complex challenges as well as advantages for success. The scholarly literature on gifted males indicates that they have differing strengths and counseling needs that counselors must recognize and address. My goal for this chapter is to examine the issues central to the intellectual and psychosocial development of gifted males, including negotiating masculinity, the role of athleticism, identity development, underachievement, issues faced by gifted culturally diverse males, and the struggles boys face when schools fail to respond to male interests and learning styles. Infused throughout this discussion are my recommendations that school counselors may want to consider in their work supporting gifted males.

NEGOTIATING MASCULINITY

> When boys speak out about "being themselves," many describe a double life in which they are one person in public—a cool guy who plays fast and lives by the Boy Code—and somebody completely different in his private life, often a much more creative, gentle, caring sort of guy. Others say they can "be themselves"

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> only after they go home, go to their own rooms, and shut out the outside world. (Pollack, 2000, p. 33)

Pollack (2000) succinctly described an issue that influences the lives of gifted males. In his groundbreaking work, Pollack (1998, 2002) described the Boy Code as outdated rules governing the ways in which males are expected to conduct themselves as stoic and unfeeling. Under this code are restrictive expectations of acceptable masculine behavior, and young men are often taunted, teased, and shamed when they attempt to break away from the stereotypical masculine behaviors. This way of thinking contributes to boys being unable to express their authentic selves for fear of being teased by peers for being vulnerable, feminine, or gay (Freedman, 2002).

More recently, Orenstein (2020) interviewed more than 100 young men across the country and found that the unwritten societal expectations described by Pollack (1998, 2002) in the Boy Code continue to strongly influence the lives of boys. Orenstein (2020) maintained that boys are "relegated to an impoverished emotional landscape" (p. 66) and become "shame-phobic," convinced that they will lose the respect of their peers if they discuss their personal problems. Boys routinely confided to Orenstein that they "felt denied—by male peers, girlfriends, the media, teachers, coaches, and especially their fathers—the full spectrum of human expression" (p. 66). One boy explained, "We learn to confide in nobody. You sort of train yourself not to feel" (p. 66).

The Boy Code may force gifted young men to camouflage their true identities and manage their image in order to live according to these rules. As a result, they may live semiauthentic lives while hiding their true selves. As they attempt to present a false image of invincibility, their image may become so convincing that the camouflaged behavior prevents them from authentic communication and intimacy with others (Howes, 2017; Percy, 2019). If boys are supposed to be in control and invulnerable, when they are not, they are ashamed. That shame may turn into resentfulness and self-loathing. Such an approach to maintaining a masculine image may lead gifted males to problems in relationships, difficulties in school, and challenges with emotional health (Glennon, 2020; Howes, 2017; Reichert, 2019).

Living according to the unwritten societal rules of masculinity may be especially complex for psychologically androgynous gifted males. Psychological androgyny has been defined as a "gender-role orientation in which an individual has incorporated a large number of both masculine and feminine attributes into his or her personality" (Shaffer, 2009, p. 271). Androgynous individuals are simultaneously balancing or blending both desirable masculine traits (e.g., being assertive, analytical, and independent) and desirable feminine traits (e.g., being

compassionate, gentle, and understanding). Psychological androgyny has been identified as a characteristic of gifted and creative individuals (Csikszentmihalyi, 1996). Researchers have reported that psychologically androgynous males have a broader understanding of appropriate and inappropriate male behavior, and such androgynous thinking does not diminish their masculinity or their identity as men (Buckley, 2018; Pauletti et al., 2017). As one teenager explained, "You shouldn't be forced to be 'manly' if you don't want to be. Your heart will guide you through any problems like that" (Zimmerman, 2005, p. 14). Gifted males who think this way and conduct their lives accordingly may be totally comfortable with themselves (Morgan, 2011; Wilcove, 1998); however, they may not be immune from abusive treatment from peers who follow the Boy Code and reject sensitivity, empathy, and emotional expression from other young men. As a result, gifted young men in schools often become the targets of bullying (Freedman, 2002; Peterson & Ray, 2006).

School counselors can play an important role in supporting gifted males in their negotiation of masculinity and unwritten societal expectations. Delving into the gifted education and psychology literature on gifted males to remain well-informed of the developmental needs of this population will enable counselors to provide appropriate individual counseling support whenever necessary. Through professional development sessions for teachers and administrators and parent workshops, school counselors are able to educate the adults in the lives of gifted boys about these challenges and direct them to appropriate resources to support them. Counselors are in a good position to collaborate with gifted education teachers in their schools in designing single-gender guidance programs for gifted males (Hébert & Danielian, 2008). Orenstein (2020) suggested a collaborative approach to bringing about healthy change for boys. She concluded that it is time to rethink assumptions about how adults raise and educate boys and that change will require "models of manhood that are neither ashamed nor aggressive, and that emphasize emotional flexibility—a hallmark of mental health" (p. 74). She noted:

> Stoicism is valuable sometimes, as is free expression; toughness and tenderness can coexist in one human. In the right context, physical aggression is fun, satisfying, even thrilling. If your response to all of this is Obviously, I'd say: Sure, but it's a mistake to underestimate the strength and durability of the cultural machinery at work on adolescent boys. Real change will require a sustained, collective effort on the part of fathers, mothers, teachers, coaches. (p. 74)

Identity Development

Shannon's family moved from Pittsburgh, PA, to a suburban community in the South. Upon arrival, he discovered that he and the students in his new high school shared very different adolescent experiences. To cope with his transition to his new community, he attempted to assimilate into the culture of his school: "I went through a clique a week trying to find somewhere to fit in, and I was everywhere but where I wanted to be" (Hébert, 2010). That struggle to find his niche included Shannon's involvement on the track team, the swim team, ROTC, the cheerleading squad, and drama club. He served as the manager of the girls' basketball team and computer graphics artist for the school's yearbook, led the Spirit Squad, was involved in ballet and jazz dance troupes, and performed hip-hop routines at school pep rallies. Shannon's search for identity also incorporated drastic changes in appearance and style:

> I tried to be preppy. Button-down shirts and khakis, but it didn't work because I listened to music like Anthrax and heavy metal. For three weeks during middle school, I was wearing jeans and T-shirts and carrying my dad's briefcase. Trying to be cool, I thought I was Alex P. Keaton. That was wild! Later I wore all the surfer looking gear I could find. I had spiked hair and would mess with gel and mousse. (Hébert, 2010)

When asked to reflect on those years he described himself as "Captain Hormone" and explained, "My motive for everything was meeting girls" (Hébert, 2010).

All adolescents undergo a search for identity, including gifted teenagers like Shannon. Researchers in gifted education who explore issues of identity development argue that because of their special talents and their advanced development, gifted adolescent males struggle with identity formation, and that search may be quite complex, as was evident in Shannon's experience (Hébert, 2020). For gifted males, in addition to facing the usual identity development tasks of adolescents, they have a role to play as gifted students that other young men do not have to manage, making it more challenging for them to reach a clear understanding of who they are. For multitalented males, their identity search may involve even more experimentation with different roles associated with their multiple talents.

Several research studies on gifted males have found that identity formation is critical to their development. In a study of six high-achieving males in an urban high school, Hébert (2000a) found that a strong belief in self emerged as the most significant factor influencing the success of the young men. They had constructed

identities that provided them with the energy, motivation, and tools they needed to cope with life's challenges in an urban environment. Their aspirations were clearly established and were aligned with their personal qualities, strengths, and talents. These aspirations for college and professional lives were attainable because they were highly motivated and had the drive to achieve.

Several qualities within these young men merged and supported their identity development: sensitivity, multicultural appreciation, and an inner will. Hébert (2000a) found that several important factors influenced this strong belief in self. Relationships with supportive adults who respected them as capable young men were significant. Strong emotional support from families was also important to them. In addition, involvement in talent development opportunities, such as extracurricular activities, athletics, and rigorous summer school experiences, reinforced their belief in self.

Similar findings were uncovered in subsequent studies conducted by Hébert on special populations of gifted males in different contexts. A strong belief in self was evident in shaping the experiences of a group of gifted university males pursuing careers in elementary education (Hébert, 2000b). The identities of the aspiring male teachers incorporated a sincere caring quality, and they recognized and appreciated the empathic qualities within themselves for they realized these traits would serve them well as teachers.

Hébert (2002) conducted a study of gifted African American first-generation college males in a predominantly White university and found that their firm belief in self, combined with strong internal motivation, played a significant role in forming their identity as achievers. Cognizant of deeply entrenched racism in institutions and individuals they encountered throughout their adolescence, they remained unfazed and committed to their goals as they pursued their college degrees on a campus where racist incidents took place. Notably, in all three of Hébert's studies (2000a, 2000b, 2002), significant adults who served as mentors to these gifted males helped to strengthen their identities.

School counselors working with gifted males can encourage them to become involved in activities beyond the classroom. They can be encouraged to experiment with a variety of outlets for their gifts and talents. School counselors recognize that involvement in clubs, teams, or campaigns provides opportunities for gifted males to build a sense of self-efficacy and success. Counselors can help young males understand that a strong sense of self evolves from being a member of a group recognized for accomplishment. Such group experiences enable intelligent young men to construct a positive sense of self and maintain high aspirations for the future. When school counselors encourage gifted boys to become involved in extracurricular activities, they let them know that their individuality is valued and their emerging identity is respected.

Counselors working with gifted males may also want to consider facilitating discussion groups that focus on the challenges of identity development. Whether conducted as part of the counselor's classroom guidance program or in small groups, healthy discussions will provide gifted boys wonderful opportunities to talk with their peers about how image and stereotypes affect their lives. School counselors can facilitate follow-up activities that enable young men to engage in self-reflection. Counselors are encouraged to collaborate with gifted education teachers in facilitating this type of outreach. Educators and counselors who want to have meaningful discussions with gifted males are encouraged to explore Peterson's (2020) helpful resource *Get Gifted Students Talking*, which provides user-friendly discussion plans focusing on personal and social development issues that are important to gifted adolescent males.

The Role of Athletics

Known as the first family of football, Archie and Olivia Manning are the proud parents of three sons: Cooper, Peyton, and Eli, all outstanding athletes. Archie Manning and his three boys have inscribed their mark on the world of American football. Archie was the all-pro quarterback for the New Orleans Saints. His oldest son, Cooper, was an all-state high school wide receiver who earned a full scholarship to play for the University of Mississippi. His promising career ended as a freshman when he was diagnosed with a narrowing of the spine. Today he thrives professionally in the field of corporate real estate. Peyton and Eli became professional NFL quarterbacks who both led their respective teams to two Super Bowl championships.

Growing up in New Orleans, the Manning brothers thrived on baseball and basketball in the beginning. Eventually they played football in a vacant lot across the street from their home. Archie Manning vowed not to push his sons into any sport. He and his wife wanted the boys to be well-rounded and active in a variety of activities, and they insisted that their sons complete whatever activity or commitment they started. Another rule established by their father was no organized football until the seventh or eighth grade until "they've had a chance to enjoy all the wonderful aspects of the game as played at the sandlot level" (Yaeger, 2010, p. 48). When choosing a high school for their sons, the Mannings purposely chose Isidore Newman High School, a private college-preparatory school known for academics rather than football.

Cal Ripken, Jr., the legendary Hall of Fame player who enjoyed 21 seasons of professional baseball with the Baltimore Orioles, currently is the head of a foundation to provide character-building athletic programs for young people liv-

ing in America's most distressed communities. Ripken collaborated with sports psychologist Rick Wolff to author a guide for parenting young athletes (Ripken, 2006). Ripken pointed out that the period of time from the day a young boy begins T-ball until his senior year in high school is short. He explained, "in the grand scheme of life, twelve years is a relatively short period of time to go from being a total beginner to being an accomplished varsity player" (Ripken, 2006, p. 5). He highlighted how those years are also filled with going to school, maintaining academics, developing friendships, and even working part-time jobs. He acknowledged that boys need to explore other aspects of life as they grow up and travel through adolescence seeking out and discovering their real interests.

Ripken (2006) reported a disturbing statistic from the Institute of Youth Sports at Michigan State University: Approximately 75% of all children who play organized sports stop playing sports entirely by the time they turn 13 (p. 5). As he and Wolff questioned why this is occurring, they found the high rate of attrition was due to excessive pressure being applied to children early on. When boys realize they are not the true superstar on their teams, they question whether investing their time and effort is worthwhile. Ripken (2006) cautioned parents: "If we somehow suggest to our kids that if they advance in sports, then they will make us proud, we're setting our kids (and ourselves) up for disappointment" (p. 6). He pointed out the question that parents need to ask themselves throughout a boy's sporting career is "Did my child enjoy himself?" (Ripken, 2006, p. 9) and emphasized, "Yes, playing sports is still supposed to be about having fun" (p. 6). Like Archie and Olivia Manning, Cal Ripken, Jr., and his wife Kelly have raised a son and daughter who have enjoyed athletics. They insisted on keeping fun the main attraction of sports for both children and made sure they were exposed to a variety of sports when they were young so they could choose for themselves what they wanted to pursue.

Both the Mannings' and the Ripkens' approach to parenting is rather remarkable in an age when many young boys begin organized competitive sports as preschoolers. These two families serve as models for others to emulate, and their experience leads us to reflect on important issues when considering the role of athletics in the lives of gifted boys. Educators and school counselors may need to join these families in reflecting on several questions that include: How does participation in sports affect a young man's psychosocial development? How do parents help gifted males enjoy an athletic culture and cope with the high pressure to achieve in such a masculine domain? The Mannings were fortunate in that all three of their sons were athletic like their father. However, what is the experience of the nonathlete, and how do families and schools support nonathletic males in a culture that clearly celebrates athletic prowess? Finally, for gifted males who must come to grips with multipotentiality during adolescence, how do multitalented

scholar-athletes decide on appropriate outlets for developing both their academic and athletic talents?

Ask young male athletes why they engage in sports and they will tell you they want to have fun, be with their friends, make new friends, learn new skills, improve their skills, be physically fit, and experience success. Sports psychologists maintain that the world of sports offers boys many more benefits than simply burning off energy. Sports enable boys to gain attention and respect in prosocial ways by exerting their natural abilities of speed, strength, coordination, creativity, and responsiveness. Sport psychologists also noted that athletics engages a young male in all aspects of being human—physical, social, cognitive, emotional, and psychological—as he strives to reach fulfillment in competition (Holt et al., 2020). Researchers have found that young people who participate in organized sports have better interpersonal skills, learn to work with others as a team, are physically healthier, and perform better academically. Participation in sports also involves learning how rules operate for the good of a large group and how to handle both success and failure, and offers opportunities for developing leadership (Fry et al., 2020).

With the understanding that sports provide adolescent males with significant benefits as well as potential stressors, it is important that gifted young men choose to participate in high-quality athletic experiences to increase the likelihood that their involvement in sports will strengthen and nurture them personally and support them academically. The influence of the coach who designs the athletic experience for gifted males is critical. Researchers have reported that high school sports have played an important and beneficial role in the lives of young male athletes (Gould et al., 2006; Van Boekel et al., 2016), and under the leadership of effective coaches, sports teams may provide environments where a young man's kinesthetic talents are nurtured and adolescent developmental growth is supported.

Hébert's (1995) research informs this issue. In an ethnographic investigation of an urban high school, he discovered an athletic subculture, a swim team, where gifted males not only excelled as athletes but also were supported by their coach in their striving for academic excellence. Under the guidance of Coach Brogan, the gifted males on that team experienced a family-like environment of athletes working together, and they enjoyed the cooperative teamwork. They learned the importance of remaining committed to a task as they strove for excellence and enjoyed great success in their winning seasons. Moreover, the gifted males benefited academically and personally under the mentorship of a coach who nurtured each athlete as an individual with intellectual and athletic talent.

The understanding of the influence of athletics on gifted males was extended through Hébert's (2006) investigation of gifted university males involved in a Greek fraternity. Hébert's (2006) participants were gifted young men who were

recruited to a fraternity of well-rounded high-achieving males known as leaders on their university campus. The five gifted males in this study had all enjoyed academic success throughout their K–12 school experience. They enjoyed involvement in gifted education programs and were among the top students in their graduating classes. Hébert (2006) found that their school experiences lacked rigorous academic challenge, and as a result these young men chose to coast through high school, focusing on athletics. They were known in their high schools as scholar-athletes; however, they were far more concerned with winning the adulation of their peers through their athletic prowess than their academic abilities. They dedicated the majority of their time beyond the classroom to team sports, practices, and serious weight training workouts, and their summers also involved intense practice time.

Once these young men arrived at the university, their athletic abilities did not enable them to compete in university-level sports teams; therefore, they shifted their focus and became involved in other extracurricular activities through the Greek fraternity (Hébert, 2006). Although they maintained their physical prowess through intramural sports, the young men in this study took advantage of opportunities for talent development offered through the fraternity and other university outlets. Hébert (2006) called attention to how the attraction of athletics in a school setting may often conflict with the educational goals of parents and teachers. In hopes of achieving the short-lived glory of athletic success, many gifted high school athletes overlook opportunities for self-improvement through other outlets available to them in school, despite the evidence indicating that the majority of high school athletes are not recruited to compete at the college level and the college recruitment process favors middle-class athletes (Hextrum, 2019, 2020). School counselors working with gifted males and their parents may want to consider an important question: How might these young men be different as a result of a balanced high school program of sports combined with additional extracurricular activities for developing skills and talents in other domains?

Underachievement and Selective Achievement

School counselors agree that underachievement, broadly defined as a discrepancy between intellectual potential and academic performance, is a major problem in schools. Researchers and clinicians suggest this phenomenon is an especially serious issue for gifted males (Ford, 2011; Price, 2017; Siegle, 2013). The underlying problems that affect underachievement in gifted students are

well-documented and include personality, family, community and school environment, social and cultural factors, and curriculum.

Individual personality factors influence the achievement orientations of gifted boys. For example, an inner drive or an internal locus of control is evident in life stories of high-achieving individuals, while underachievers often blame their lack of success on external factors in their lives. A gifted middle school boy might point to the lack of the latest technology at home: "If dad would only buy me that computer I saw at the mall, I know I'd be more motivated to do my homework, and I could find cool stuff online for my school projects." Instead of taking charge of his academic efforts, he brushes off his poor performance in school on external circumstances he knows are beyond his control (Siegle & McCoach, 2005).

School counselors have noted that family dynamics also impact boys' efforts in school (Hébert, 2001; Rimm, 2008). For example, sibling rivalry often contributes to loss of academic motivation. Consider the gifted teenager whose younger brother is the academic superstar of the family. When he decides he cannot compete with his brother, he gives up trying, searches for other outlets for self-expression, and may purposefully underachieve in academics: "Ethan is the nerd of our family. He's every teacher's dream and a total wuss. I just want to play guitar in my rock band."

The values of a community can also influence how academic achievement is regarded. What becomes of the scientifically gifted boy who leaves a school district in a coastal town where environmental research labs drive the economic base of the community, and transfers to a school in a rural community where Little League baseball dictates the social lives of boys? The young scientist who thrived in a school where boys investigated their local beaches and engaged in environmental campaigns finds himself without science buddies and becomes frustrated when his academic strengths are not recognized or supported. Eventually his academic skills in science may deteriorate.

The male peer group exerts a powerful influence on a young man's attitudes toward academic achievement. When a boy's friends determine that academic excellence is not masculine, school life becomes complicated for him. Consider the experiences of a gifted culturally diverse male capable of excelling in honors or Advanced Placement courses whose participation in such programs is ridiculed by his male friends. He questions whether it is worth the social risk to achieve academically.

Finally, the school curriculum may exacerbate underachievement in gifted males. As a result of the standards movement in education, schools are focusing more on reading and language arts instruction (Gurian & Stevens, 2005; Hébert & Pagnani, 2010). This increased time on the development of reading and writing skills comes with the price of allocating less time to other content

areas, such as science and art, that have traditionally motivated males and enabled them to excel. As a result, boys have fewer opportunities to strengthen their skills in their preferred academic subjects, they discover that schools do not value their strengths, and in response they underachieve (Gurian & Stevens, 2005; James, 2015).

In addition to being concerned about gifted male underachievers, school counselors need to recognize a second population they may encounter in their work—selective achievers. These students are "intrinsically motivated individuals whose performance matches ability only in specific areas that satisfy their interests and personal goal orientations" (Hébert & Schreiber, 2010, p. 570). Two studies on gifted males have identified selective achievers (Hébert & Schreiber, 2010; Speirs Neumeister & Hébert, 2003). These two comprehensive case study investigations identified patterns of behavior among gifted collegiate males. The findings indicated that strong intrinsic motivation, combined with independence and resistance to conformity, played an influential role in shaping the achievement patterns of young men.

These young men demanded serious intellectual challenges associated with gaining practical knowledge that would enable them to reach their personal goals (Hébert & Schreiber 2010; Speirs Neumeister & Hébert, 2003). They maintained that personalities and teaching styles of educators were important factors in deciding whether or not they would put forth effort, and they insisted on efficient ways of learning. Hébert and colleagues (Hébert & Schreiber, 2010; Speirs Neumeister & Hébert, 2003) concluded that teachers and counselors who are trying to understand what is happening with selective achievers have to refrain from jumping to quick conclusions and assigning the label "underachievers" or "slackers." Instead, they need to seriously examine the motivation behind the inconsistent achievement patterns and understand the important distinctions between underachievement and selective achievement.

School counselors working with gifted male underachievers will need to keep abreast of the research being conducted on a variety of interventions designed to reverse the problematic behaviors. Researchers have found that providing gifted boys opportunities to pursue self-selected investigations of authentic problems they identify can change underachieving behaviors in boys (Hébert, 2020). Others have suggested that counseling groups in schools offer promise in addressing underachievement (Peterson, 2018). A number of school districts have found success with mentoring programs for underachieving males to examine career possibilities or pursue independent projects under the guidance of an adult mentor (Hébert & Olenchak, 2000). A mentor who remains in touch electronically can make an important difference for underachieving students. College students who serve as powerful role models for success can support younger adolescents. College profes-

sors may also be effective in this role. Dr. Gilman Whiting (2013) described his yearlong mentorship with a student struggling to remain focused on academics. Due to distance, he communicated with the young man through emails, phone calls, Facebook, and Twitter. He shared his positive experience in "E-Motivating Malcolm: Academic Achievement via Electronic Mail" (Whiting, 2013). School counselors need to investigate Dr. Whiting's approach to long-distance mentoring and consider arranging similar partnerships for their students. In addition, several leaders in gifted education have proposed structured intervention models for reversing underachievement, including the Tri-Focal Model (Rimm, 2008) and the Achievement Orientation Model (Siegle & McCoach, 2005).

Following a review of these various approaches to addressing the problem, counselors will be better prepared to design interventions for the gifted males in their schools. It is important to keep in mind that each underachiever is an individual case. Each young man who arrives in a counselor's office may be dealing with a variety of problematic issues that are interacting and causing problems with his academic situation. Peterson (2018) maintained that for school counselors the problem of underachievement was more than simply a discrepancy between measures of ability and achievement. She indicated that counselors must look beyond the definition of underachievement and examine the dynamics involved in each problematic situation. She proposed that gifted underachievers were often "feeling developmentally stuck regarding identity, direction, relationships, autonomy or conflict at home" (p. 144). Counselors may discover that underachieving behaviors may be a way for a young man to call attention to a personal need that is not being recognized. Addressing the issues of gifted underachieving males in schools may be one of the most complex challenges a counselor may undertake; however, when interventions are successful, the rewards are great.

Culturally Diverse Gifted Males

Caleb returned home from his university for Thanksgiving break and announced to his mother that he had changed his undergraduate major. As a single parent raising three children, Caleb's mother was delighted when Caleb earned a prestigious Presidential Scholarship to study engineering. He was one of three African American males in the university's engineering program. When Caleb realized this field of study was not aligned with his strengths, he decided to switch to advertising, a major that enabled him to apply his creativity. Caleb's mother had dreamed of her son as the successful engineer who would be in a good position to provide for her following her retirement. Caleb described the challenge he faced when his mother struggled to understand his decision.

> I slowly showed her. I was able to highlight the contests and awards I was winning in advertising. I explained, "My professors really respect me Mom; they like me a lot. I'm one of the top students in the program." She smiled and said "That's nice," but she was only interested in having an engineer. You see movies where the son comes home from school and decides he wants to drop out of college to enter acting. That's how I felt.
>
> My mother realized that a successful career in advertising would happen for me in places like Miami, Chicago, New York or Atlanta. She wanted me home in Decatur, Alabama as a civil engineer. (Hébert, 2003)

Caleb's mother began to better appreciate his field of study in his senior year at the university when he shared his electronic dossier that included all of his award-winning advertising campaigns and projects. His mother's acceptance of his plan took several years. Today Caleb is thriving in the advertising industry, living in Manhattan and enjoying his work that provides him many international travel opportunities.

Caleb's experience is consistent with many culturally diverse students who may have to negotiate the culturally specific expectations of their parents and families. Parents often have very definite plans for their children's futures. Within culturally diverse groups who have immigrated to the United States for a better quality of life, parents may have high expectations for their children's success in achieving a higher standard of living for their own families. This is especially the case when the children are the first generation in the family to pursue college degrees. Moreover, certain professions may be more highly valued or respected within a particular cultural group. For example, within Asian cultures, technical fields and the hard sciences are often highly valued. Asian American adolescents who question the career choices deemed appropriate by their parents may cause conflict among family members.

This problem was noted by a participant in Olenchak and Hébert's (2002) research study on gifted underachieving university students. Jimmy was an undergraduate at a major urban university whose family had immigrated to the United States from Vietnam. As the eldest son in his family, Jimmy was expected "to make something of himself." His parents insisted that his educational preparation should lead him to a career that would guarantee, at minimum, a middle-class lifestyle. Jimmy's parents had decided early on that he would be a physician, and this message was delivered early in his adolescence:

> From my earliest awareness, I knew that I had to become a doctor to make my parents happy and proud. They made me feel like it was my destiny to be a successful doctor and that I really had to use my brain to get there. All along, it was science fair after science fair, working on science kits at home, and even joining science clubs as early as I could . . . but the bad news was that I could never even think about anything else. It was going to be science so that someday I would be ready for college to become a doctor. Period! (Olenchak & Hébert, 2002, p. 200)

Jimmy faced a dilemma when he realized the rigidity of his premedical program did not align with his strengths and talents. He had become interested in his parents' restaurant business. He remembered times as a teenager when he helped out his parents in the restaurant and thoroughly enjoyed it. He said, "I know I could be a great chef if I had the opportunity" (p. 203). He added, "but if I ever did anything like that, I'd have two huge obstacles: getting up the nerve to tell them and then getting them not to think I let them down" (p. 202).

Caleb's experience and Jimmy's dilemma highlight just how stifling a set of rigid parental expectations can become for a talented young person with goals and aspirations that differ from those their parents have for them. In addition, culturally diverse males may also receive crippling messages from peers regarding academic achievement. These young men often experience conflicts between the values of their culture and those of the dominant culture, and members of their cultural peer group may discourage identity explorations that are at odds with the traditions of their cultural group. Peers who feel insecure about their own abilities may be threatened by the successes of the gifted males and lash out at them. By associating success in school with assimilation into the dominant culture, peers may direct abusive and derogatory remarks toward academically oriented young men, which may influence gifted males to camouflage their intelligence. Whiting (2009) described the following poignant scenario that highlights this issue:

> School personnel were transporting Black students to an awards event in which students were to be honored for outstanding achievement. One Black male, a junior named Keith, approached the school van dressed in baggy pants, an overly large sweatshirt, and headband. Upon entering the van, he proceeded to pull off the outer layers of his outfit to expose a crisp dress shirt and creased khaki pants. He swapped tennis shoes for casual shoes. Before anyone could question him, the young man asserted: "I have an image to maintain." Being smart isn't part of that image.

> Not surprisingly, after the event and before returning to school, Keith went back into what his peers would accept him in, the original "urban" outfit. (p. 225)

By sharing Keith's experience, Whiting (2009) raised several critical questions that must be addressed if educators and counselors are to support the emotional well-being of gifted culturally diverse males: How do young men of color make compromises in negotiating the need for achievement and the need for affiliation and social acceptance? How many gifted, high-achieving young men of color feel they must camouflage their intelligence and academic accomplishments? Moreover, how do gifted diverse males reconcile being young men of color in a society where racial injustices are widespread?

Defining, being aware of, and understanding prejudice and racism are critical if educators and counselors are to appreciate the experiences of many culturally diverse students in schools. Young men from diverse racial and ethnic backgrounds experience racism on a daily basis. Consider the experience Caleb encountered during his first year at the university. He and his roommate, a young Indian student from Bombay, were unwinding in their dormitory room following a long day of classes. The dormitory corridor was quiet that afternoon, and through a small window above their door they overheard another dorm resident comment to a new arrival on the floor that "there were two toasty ones living in that room" and advise the new resident to "watch his stereo equipment" (Hébert, 2003). Caleb pointed out that, after that incident, he and his roommate emotionally supported each other and maintained an important friendship (Hébert, 2002).

With Caleb's experience in mind, counselors must realize that the impact of prejudice and microaggressions in the lives of culturally diverse students cannot be denied or ignored. Microaggressions are defined by Sue (2010) as "brief, commonplace daily verbal, behavioral, or environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory or negative prejudicial slights and insults toward any group" (p. xvi), particularly toward those who are culturally marginalized. Such indignities may occur as negative messages concerning their ability to achieve academically. Communication of low expectations may come from teachers, peers, or society in general, and such hostile messages are bound to have a negative impact on the self-concepts of young men of color. Gifted culturally diverse males are not immune to this problem. Moreover, because of the heightened sensitivities (Piechowski, 2014) that are part of the emotional makeup of these young men, they may be more aware of and sensitive to social injustices and prejudice, and this problem may affect them emotionally even more deeply.

Schools Not Responding to Male Interests and Learning Preferences

Michael Smith (2005) appreciated that his father handed him Claude Brown's (1993) autobiographical account of growing up in Harlem, *Manchild in the Promised Land*, and told him not to let his mother know that he had recommended the book. As a teenager growing up in suburban Chicago, Michael learned of the drugs, sex, and violence that marked the author's life and he noted that his social conscience began to grow from the experience of reading the book. Years later Smith and his colleague Jeff Wilhelm (Smith & Wilhelm, 2002) studied the literate lives of boys and authored a book entitled *Reading Don't Fix No Chevys: Literacy in the Lives of Young Men*. In their work, they introduced their readers to Bam, an 11th grader who was captivated by John Steinbeck's *Of Mice and Men*: "Oh man I love that book. I read that book eighth, ninth, tenth, and I have it in eleventh grade. I read it every year" (Smith, 2005, p. 237). Bam explained that Steinbeck's work was important to him because his older brother had given it to him. Smith and Wilhelm (2002) also introduced Mark, who rose early to check the Internet when his favorite hockey team had a late night game and he needed to know the score because his friends at school would expect a report from him. Neil, another teenager, did the same by keeping up with the latest in movies by reading reviews. Another teenager read the sports pages to be able to talk with his father about athletic news. Smith and Wilhelm noted that boys understand that reading is not something they do alone. Reading can be about building relationships.

Through their work, Smith and Wilhelm (2002; Smith, 2005) have clarified that boys in school have learning needs that differ from those of girls. In addition, psychologists and researchers have found that what boys are interested in and how they prefer to learn are often different from their female counterparts in school (Gurian et al., 2009; Neu & Weinfeld, 2007). This serves as a call to school counselors to work with administrators and teachers in reevaluating the ways they teach the males in their classrooms. For many boys, reading is a serious roadblock to academic success. Schools have reported boys' achievement in reading and writing spiraling downward even as the standards movement and mandated testing have increased schools' emphasis on teaching language arts (Gurian & Stevens, 2005).

Educators have reported that boys often think of reading as a feminine activity because they have little interest in the books chosen by their primarily female teachers (Gurian & Henley, 2001; Hébert & Pagnani, 2010; Scieszka, 2005). Boys enjoy different genres of reading and as a result, they are challenged by

their reading preferences not being addressed in academic language arts curricula (Cavazos-Kottke, 2006; Loh et al., 2020). Boys enjoy nonfiction, science fiction, fantasy, horror, action, and comedy, yet language arts classes focus on the types of literature that typically appeal to young women. For example, character-driven narrative fiction may have little appeal to young men, yet the majority of required reading books comes from this "dialogue and emotions" literature, and boys are often asked to explore the feelings of the book characters, although they may have little ability or desire to do so (Partington, 2006).

Schools often offer an environment that discourages young men from learning in ways that are simply more natural for them. Boys need movement, authentic hands-on projects, research, science investigations, and experiential activities, and these are often neglected in schools. Boys also have a natural tendency to enjoy activities in which they can be physically active and competitive (James, 2015; Kindlon & Thompson, 2002), and when a school environment does not provide appropriate outlets for their energy, boys quickly become disenchanted. The messages delivered by the young men in Zimmerman's (2005) work captured this challenge succinctly: Royce reported, "I get discipline slips a lot," Ricky offered, "I normally get into trouble for blurting out or being impatient," and Trevor said, "It seems like everything is a distraction for me at school. Sports, girls, and music. I can barely focus" (p. 71). Gary had a less troublesome report: "I get good grades, but I have to force myself to do the work. It's extremely hard to sit in a chair for a long time, but I try to focus" (Zimmerman, 2005, p. 76). It is important that school counselors listen closely to these messages and help educators understand that boys like Ricky, Trevor, Gary, and Royce may be multitasking and interacting with various technologies at home. When they arrive at school, these same boys are expected to maintain focus for extensive periods of time on information presented in the same low-tech ways their teachers learned—listening to an adult talk or reading from a book (Neu & Weinfeld, 2007).

To address this issue, scholars have called attention to the critical need to incorporate digital technologies that engage adolescent males and to understand what young males view as modern literacy (Alvermann, 2005; Hollett & Ehret, 2017). Boys today are coming to understand the world in which they live via the Internet, completing homework online, and using social networking to remain connected to friends. Gifted boys are often the multitaskers who manage text messaging, blogging, and designing webpages while simultaneously completing their homework (Hébert & Pagnani, 2010). Capable young men will engage in learning activities that have intrinsic value; therefore, educators are challenged with learning how to apply the afterschool technology practices of adolescent males into their classrooms. For teachers to address the intellectual needs of gifted males, incorporating innovative digital technologies is critical to success.

Conclusion

The issues central to the intellectual and psychosocial development of gifted males presented in this chapter are significant and involve unique challenges for gifted boys and young men. It is crucial that school counselors have an understanding of the experiences of gifted males in order to work effectively with teachers and parents in nurturing the well-being and promoting the success of this special population. Empathetic school counselors can make positive differences in their lives.

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CHAPTER 21

Strengthening the Moral Development of the Gifted: Interdisciplinary Insights About Ethical Thoughts and Actions

Don Ambrose

Environmental devastation, expanding social inequality, school shootings, the opioid epidemic, the COVID-19 pandemic, political upheaval and civil unrest, exploitative warfare, forced migration, and other severe, large-scale problems are impacting students today, directly and indirectly, with implications for those who work with the gifted. The toxic nature of these problems illustrates the importance of ethical awareness in the development of gifted young people.

Counselors and educators of the gifted want to do good work in the world. So how much good work are they doing? Do most of the gifted young people they mentor and teach eventually establish productive careers aimed at ethically positive, or at least ethically neutral, outcomes? How many of them do significant or even enormous harm in the world when they become adults? Addressing these questions requires us to expand our vision beyond the usual borders of the field, so we need to carry out some interdisciplinary exploration.

Multidisciplinary Insights About the Moral Development of the Gifted

Exposure to research and theory from diverse fields such as ethical philosophy, economics, evolutionary biology, anthropology, social epidemiology, and political

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science can help practitioners and scholars in the field of education extend their understanding of the moral development of the gifted. Constructs from these disciplines can augment and enrich research and theory in the field. For example, a volume on the connections between ethics and high ability brought together the work of leading scholars in high-ability fields (gifted education and creativity studies) with scholars in other fields and disciplines (e.g., economics, psychology, legal theory, political science, ethical philosophy, quantum physics, critical thinking) whose work is relevant to the ethics-giftedness nexus (Ambrose & Cross, 2009). The viewpoints in this collection were diverse, sometimes conflicting and other times mutually reinforcing. Morality is a highly complex, nuanced construct, so it requires these multiple perspectives and the concomitant mutually shaping insights they provide. The rest of this section of the chapter follows this pattern by highlighting concepts from diverse disciplines that reveal ethical issues influencing the lives of the gifted.

Although most gifted and talented young people likely become productive, ethical adults, some, perhaps many, end up engaging in dark creativity, establishing innovative works that undermine the quality of life in societies, exploit vulnerable individuals and populations, and even undermine the sustainability of life on the planet over the long term (for elaboration on dark creativity see Cropley et al., 2010; Gutworth et al., 2016). They do this harm by worsening the already severe, extremely toxic inequality that has been growing for several decades (Stiglitz, 2015; Wilkinson & Pickett, 2019), worsening climate change by promoting and invigorating dirty energy industries instead of helping societies move toward sustainable energy systems, and contributing to the strength of other 21st-century macroproblems. Details about macroproblems show up later in this chapter, and elaboration on them is available in Ambrose and Sternberg (2016a, 2016b).

Some of the gifted individuals causing enormous harm in the world do so because they engage in self-deception, which is a form of dogmatism (for the intricacies of self-deception see Mele, 2001). Counterintuitively, very bright individuals can be as prone to dogmatism as those of much lesser intelligence (Elder & Paul, 2012) because they fall in love with their own ideas and engage in intricate, creative mental gymnastics to prove to themselves and to others that their beliefs and thoughts are correct. Those trapped in dogmatism lock themselves into various blends of shortsighted, narrow-minded, superficial, rigid thinking (Ambrose & Sternberg, 2012; Ambrose et al., 2012).

Some other dangerous, damaging gifted individuals are psychopaths, or at least near psychopathic. Those with complex, creative, psychopathic minds are devoid of empathy and ethical awareness. They employ highly effective, creative manipulation to carry out exploitative, damaging actions in the world for selfish

purposes. They also tend to be attracted to powerful positions in society, using their unethical, creative thoughts and manipulative actions to launch themselves into high-level corporate executive ranks and political and legal offices (Babiak & Hare, 2006; Babiak et al., 2010; Boddy, 2017). These powerful positions magnify their harmful impact.

When psychopathic individuals become too powerful, the society they are influencing can become psychopathic itself, in the worst case scenario turning into a psychopathic plutocracy (Ambrose, 2015). Such a society mirrors the characteristics of the individual psychopath to the point where it becomes a gigantic, societal psychopath extending its tentacles throughout the world, causing enormous damage. Arguably, the trend toward authoritarian populism in the 21st century (see Inglehart, 2018) represents a powerful, widespread movement toward the expansion of psychopathic plutocracies at a time when complex, troubling 21st-century conditions illustrate the need for the opposite form of socioeconomic and political actions in the world—ethical, visionary, compassionate organizational leadership and governance.

What follows are brief portrayals of some issues contributing to, or produced by, psychopathic plutocracies that require more ethical awareness and moral actions on the part of gifted individuals in today's world.

Erosion of Democracy

Democratic governance has been eroding in developed nations because powerful individuals and groups have been commandeering political power, especially in nations plagued by the ascendance of authoritarian populism. In eroding democracies, power and wealth are funneled up into the pockets of psychopathic plutocrats. The needs and wants of the vast majority are ignored to the point where third-world conditions begin to emerge in nations that used to be healthy, prosperous, somewhat ethical democracies (Ambrose, 2019; Baradaran, 2018; Muirhead & Rosenblum, 2019). Although this trend has been accelerating in recent years, it has been emerging for several decades. Years ago, the prominent political scientist Sheldon Wolin (2008) argued that democratic-capitalist nations were becoming democracies in name only because they were sliding toward inverted totalitarianism, which involves rule by and for corporations and the extremely wealthy.

Severe Inequality

Socioeconomic inequality has been increasing around the world (Case & Deaton, 2020; Stiglitz, 2015). This is especially the case in nations dominated by neoliberal ideology and neoclassical economic theory, which magnify the importance of individual achievement and, when taken to the extreme, bizarrely portray selfishness as a virtue and compassion as harmful (Ambrose, 2012). The chronic stress generated by severe inequality makes social problems more toxic and powerful. These social problems include far higher levels of drug and alcohol abuse, mental illness, violence and incarceration, teen pregnancies, and much lower levels of trust and social mobility (the chance that children will be able to achieve more than their parents; Wilkinson & Pickett, 2019). In essence, when inequality becomes severe, human rights are eroded (Gottschalk, 2015; Moyn, 2018).

Pernicious Racism

As evidenced by the ascendance of authoritarian populism as well as police violence, which sparked the recent, widespread Black Lives Matter protests in the United States, toxic racism persists over the long term (Shelby, 2018; Sobo et al., 2020). In addition to being treated unfairly and violently on the streets, those suffering from racism lack economic opportunity because they face daunting barriers preventing job acquisition and opportunities for building wealth through home ownership, as well as a host of other issues.

Corporate Corruption

This phenomenon, which is related to the psychopathic plutocracy problem mentioned earlier, always has been a serious problem in many societies, but it has been magnified in recent decades due to the dominance of the aforementioned dogmatism embedded in extreme neoliberal ideology and neoclassical economic theory (Ambrose, 2012; Duggan, 2019). Just a couple of examples of this corruption include the deceptive, opaque manipulation employed by powerful players in the financial industry and the extreme inefficiency and exploitation that characterize the American healthcare system. Creatively designed and intelligently refined deceptive financial instruments catalyzed the 2008 economic collapse, which severely harmed the lives of billions around the world (Akerlof & Shiller, 2015; Ferguson & Johnson, 2014). More recently, creative applications of new technological systems in the financial industry have enabled crafty, intelligent, corrupt power players to diminish market transparency and erode fairness

and efficiency for personal gain while robbing from the vast majority of investors who aren't insiders (Mattli, 2019). Meanwhile, the largely privatized, deregulated American healthcare system is far less efficient and far more expensive than the largely government-run, more regulated healthcare systems of other developed nations (Gøtzsche, 2013; Reinhardt, 2019). The unethical, gross overpricing of prescription drugs is just one manifestation of this corruption.

As a consequence of these troubling, large-scale developments, educators and counselors of the gifted must work to inject more ethical awareness into gifted education. Better understanding of influences on moral development will help counselors and educators of the gifted develop more effective guidance and educational services for gifted youth, who tend to be more sensitive to moral dilemmas than other children. Fortunately, there has been some work along these lines.

Moral Development and the Gifted: Some Current Understandings

This is not a literature review of wisdom in the field of gifted education, so I do not treat the extant publications comprehensively here. Instead, I mention a few relevant highlights and then move forward into some additional recommendations for strengthening ethical awareness and moral development.

Overall, the moral dimensions of high ability have attracted some attention in the field of gifted education because sensitivity, intuitive capacities, observational powers, and strong cognitive abilities tend to make the gifted sensitive to moral issues (Ambrose et al., 2013; Delisle & Schultz, 2016; Roeper, 2008; Silverman, 1993). When considering the moral dimensions of giftedness, the inner, emotional lives of the gifted often come into play because emotional tension, sensitivity, and overexcitability are tied in with positive maladjustment that can lead to moral development over the long term (Cross, 2018; Dabrowski & Piechowski, 1977; Harper & Clifford, 2019; Lovecky, 1997; Piechowski, 1986, 2003; Piirto, 2005; Silverman, 2016). The intense inner experiences of gifted young people generate both barriers and advantages to the development of moral reasoning. Their deeper and broader awareness of moral issues present them with difficulties not so keenly experienced by those of lesser ability.

In terms of the practical aspects of giftedness and ethics, Folsom (2009) found creative ways to apply her TIEL (teaching for intellectual and emotional learning) curriculum model to the moral development of the gifted. This model provides specific ways for educators to develop an optimal balance of ethical character traits and intellectual skills. According to Jacobsen (2009) and Sternberg (2005, 2009, 2017, 2020), the strong intellectual abilities of the gifted make it possible

for them to align their moral development with the development of leadership skills. Grant (2009) argued that character education programs often come up short because they usually derive from superficial thinking.

Scholars in the field have been promoting global awareness in the development of gifted minds, and such work is consistent with ethical philosophers' recommendations to adopt a more universalist approach to ethics. For example, some experts provide practical classroom interventions that can expand the sociocultural awareness of gifted young people (e.g., Gibson et al., 2008; Terry, 2008).

More attention to global awareness among gifted young people should help them avoid falling prey to the ethnic, religious, and ideological dogmatism that can ensnare even the brightest minds and incline them toward acts of unnecessary conflict and the oppression of others. Moreover, without sufficient attention to the dynamics of ethical development, we run the risk of developing talents that will be used for unethical, possibly evil purposes, and of missing the opportunity to capitalize on potentially strong combinations of ability and altruism (Ambrose, 2008; Karami et al., 2020; Neihart, 2009; Ruf, 2009; Sternberg, 2020; Tannenbaum, 2000). These concerns are magnified when one considers that bright young people can be prone to the moral paradox.

In addition to following the advice in these various gifted-education sources, some other ways to inject ethical awareness and moral action into the guidance and development of gifted young people include (a) correcting for the distorted version of personal responsibility that has come to dominate some societies, especially in the United States and other nations dominated by neoliberalism and neoclassical economic theory; and (b) using some new creative and critical thinking strategies that are aimed at the development of panoramic scanning abilities in the gifted and the development of ethical awareness. Panoramic scanning is the ability to consider the implications of actions, trends, and other phenomena over the long term (decades, centuries, even millennia) and to develop broad scope awareness of contextual issues and interdisciplinary connections (Ambrose, 1996, 2009).

Making Personal Responsibility More Responsible

Political scientist Yascha Mounk (2017) illustrated how conceptions of personal responsibility became more selfish in recent decades. In the past, personal responsibility meant looking after one's own wants and needs but also helping others when possible and appropriate. More recently, personal responsibility has shed the "helping others" element to the point where it simply means looking after oneself. This diminished form of personal responsibility enables gifted individuals who lack sufficient ethical development to ignore the plight of those

they otherwise would consider helping. Consequently, they are allowed to feel quite comfortable even though large numbers of fellow citizens are suffering from disastrous circumstances, including some of the macroproblems mentioned earlier in this chapter (e.g., severe inequality, bankruptcy and homelessness caused by extensive corruption in the financial and healthcare systems).

Due to this erosion of personal responsibility, counselors and educators of the gifted should pay heed to reconceptions of giftedness that magnify ethical awareness and responsible, moral actions in the world. For example, Sternberg (2017) developed the ACCEL model of giftedness (active, concerned citizenship and ethical leadership) to shift giftedness away from excessive individualism toward working for the greater good. His earlier conception of WICS (wisdom, intelligence, and creativity synthesized) magnified the importance of wise, ethical leadership in institutions and political systems (Sternberg, 2003, 2005, 2009). Most recently, his conception of transformational giftedness, as opposed to transactional giftedness, aims at removing selfishness from the development of gifted young people and injecting long-range vision (e.g., panoramic scanning) and ethical wisdom into their thoughts and actions (Sternberg, 2020; Sternberg et al., 2021). In addition, a variety of other helpful perspectives on moral giftedness came forth in Ambrose and Cross (2009) and Karami et al. (2020).

Using New Creative and Critical Thinking Strategies to Establish Ethical Awareness

Many creative and critical thinking strategies are available for use in gifted education. A few of them apply well to the development of ethical awareness and moral responsibility. For example, the jurisprudential strategy, which was inspired by thinking in legal studies, enables students to consider complex, controversial issues and produce nuanced perspectives (Arends & Kilcher, 2010; Joyce & Weil, 1992). An individual or group using jurisprudential synthesis will (a) carry out an in-depth exploration of a controversial issue; (b) identify two opposing positions on the issue; (c) put one of these positions in the first column of a three-column table and list arguments and evidence in favor of that position in bullet points in this column; (d) put the opposing position in the third column of the table and list arguments and evidence in favor of it in that column; (e) create a compromise position in the middle column of the table, complete with arguments and evidence, while ensuring that the compromise doesn't grossly violate either of the opposing positions in the outside columns; and finally (f) come to some conclusions about the implications of the compromise position. Jurisprudential synthesis works against the dogmatism that tends to undermine and erode ethical awareness.

Some new creative and critical thinking strategies have been derived from concepts and research findings in a wide variety of academic disciplines and professional fields (Ambrose, 2021). A few of them are briefly described here as examples of processes that can produce more ethical awareness in the gifted.

Moral-Legal Analysis. Given the aforementioned imperfections in the ethical awareness of adults in the world, including some of the most gifted adults, it should come as no surprise that laws and morality often do not overlap very well. Examples from history illustrate this. For centuries, slavery was legal but extremely immoral. Racist Jim Crow laws in the American South were highly unethical. More recently, the Supreme Court Citizens United decision gave extremely wealthy individuals and corporations the right to purchase politicians and undermine democracy (Hasen, 2016). Arguably, that decision was very legal because it was created by the Supreme Court, while also being extremely immoral because it diverted most of the power in a once vibrant democracy into the hands of the powerful few.

The strategy of moral-legal analysis can enable gifted young people to perceive the discrepancies between morality and legality. To engage in moral-legal analysis, a student or group creates a square figure with a legal continuum on the horizontal dimension and a moral continuum on the vertical dimension. After that, they study phenomena from history, literature, the sciences, or current events and map them onto the square. They place some actions in the upper-right corner of the square because they are both legal and ethical (e.g., the work of Doctors Without Borders). They place other actions in the lower-left corner of the square because they are both illegal and immoral (e.g., the actions of a mass murderer). Other actions go in the upper-left corner because they are illegal but highly ethical (e.g., the early work of civil rights leaders such as Martin Luther King, Jr., and Nelson Mandela). They place some other actions in the lower-right corner because they are quite legal but extremely unethical (e.g., the aforementioned Citizens United decision). Other actions are placed closer to the middle of the square because there is less clarity about the extent to which they are legal or ethical (e.g., the work of lobbyists in Washington, DC). Arguments about the placement of these issues can generate considerable critical and creative thought, especially if the students have been forewarned about the tendency of those engaging in arguments to fall prey to dogmatic thinking.

Undermining Your Own Position. Speaking of dogmatism, a way to directly attack it is to engage in the strategy of undermining your own position. As mentioned earlier in this chapter, very bright people often fall prey to self-deception by figuring out creative ways to justify their own thoughts and actions, even when those actions are quite flawed. An individual or group can work against this form of dogmatic self-deception by carrying out research into a complex phenomenon

or situation and developing a thoughtful perspective on it. After that, they refine that perspective by developing a coherent, solid argument on the topic. But the next step enables them to ensure that they are not trapped within dogmatism. In this step they are required to honestly and actively seek evidence against the position they just created with the intent of either overturning it or refining it to make it stronger. By carrying out this research against their original position they are more likely to produce a nuanced perspective incorporating shades of gray between otherwise polarized perspectives. Those who can think in nuanced ways are much less likely to dogmatically engage in unethical actions that are invigorated by self-deception (Elder & Paul, 2012).

Altruistic Analysis. Ethical philosophers have distinguished between two types of compassion (Gewirth, 1998; Monroe, 1996, 2004, 2011). Those guided by particularist morality will be kind, generous, and thoughtful toward others who fit their identity group (e.g., race, religion, ethnicity, class). But they tend to be dismissive of, or even cruel toward, those who don't align with their identity. The cruelty can extend all of the way to tolerating or even participating in genocide. In contrast, those guided by universalist morality are kind, thoughtful, and generous toward others within and beyond their identity group. They tend to perceive all people as members of a common group—humanity.

Gifted students engaging in altruistic analysis will carry out research looking for examples of altruistic behavior. Their search can extend into literature, historical phenomena, scientific and technological innovations, and current events. After they learn about the nature and intricacies of the altruism, they determine whether it fits particularist or universalist morality, or some position in between the two. Here, they can carry out discussions and arguments about the positioning of the action, thus generating considerable creative and critical thought. If they determine that the action was particularist, the next step in the process is to propose ways in which the action could be pushed from that form of particularism toward universalism. In so doing, students are thinking about a flawed, somewhat immoral action in the world and making it better by injecting ethical awareness and moral action into it.

Macroproblem Analysis. The gigantic, potentially devastating 21st-century problems mentioned earlier in this chapter have been deemed macroproblems because they are (a) large-scale and international so they cannot be solved from within the borders of a single nation, no matter how powerful; (b) interdisciplinary because they cannot be solved through the expertise of accomplished professionals in a single academic discipline or professional field; and (c) long-term because they took decades or even centuries to emerge, so they likely will take a long time to solve (Ambrose & Sternberg, 2016a, 2016b). Understanding that macroproblems exist, and contemplating their intricacies, is an important dimen-

sion of ethical awareness in the gifted. If students lack such understanding, they will be inclined to ignore or misunderstand the severity of the problems that threaten to severely undermine the quality of life for billions around the world, or even destroy life on Earth.

To carry out a macroproblem analysis, students research a large-scale global issue and determine whether or not it fits the macroproblem criteria (international, interdisciplinary, and long term). They develop a report based on the following prompts:

- Why is this a macroproblem? How does it fit the criteria?
- Develop a plan for building public awareness of the macroproblem. Develop a tentative plan for solving your macroproblem.
- Determine the academic disciplines and professional fields that should be involved in its study and solution. What resources would be required to address it?
- What barriers will the problem solvers confront? How might they overcome those barriers?
- What will the world be like if the macroproblem is solved, or not solved?

After engaging in macroproblem analysis, the students will be more inclined to think big picture and consider the ethical implications of their own actions as well as the actions of powerful individuals and groups in their society.

WICS Analysis. This creative and critical thinking strategy is based on the WICS model of human action developed by Robert Sternberg (2003, 2005, 2009). The WICS model portrays human actions as arising from various blends of wisdom, intelligence, and creativity. An action can be intelligently produced but lacking in creativity and wisdom. In that case it will be well designed, but it won't be original or novel, so it likely won't have much impact in the world. If it does have some impact, it could be harmful because it lacks wisdom, the ethical element. Another action can be creative but not intelligent or wise. In this case, it will be original but lacking in intelligent, practical refinement. So again, it likely won't have much impact on the world, and to the extent that it does have impact, it could be harmful, again because it lacks ethical wisdom. Yet another action can be intelligent and creative but not wise. In that case, it will be novel and thoughtfully designed, so it likely will have strong impact in the world. But the lack of wisdom could make it devastatingly harmful. Again, the creatively designed, intelligently refined, deceptive financial instruments that precipitated the 2008 economic collapse are examples of this kind of action. Finally, an action that includes a blend of all three—intelligence, creativity, and wisdom—likely will have a strong, positive effect in the world because of the injection of ethical awareness and moral action.

Students carrying out a WICS analysis will study an initiative in the world. Again, they can choose from an action or trend in literature, history, science, or current events. During their research they determine the extent to which creativity, intelligence, and wisdom show up in the actions of those engaged in the initiative. If they determine that the W is missing from the initiative, they propose some ways to incorporate ethical awareness and moral action to improve the work of those involve and, ultimately, to improve the world.

These are a few examples of the ways in which new creative and critical thinking strategies can help with the improvement of ethical awareness in the gifted and talented. A number of other strategies are available. But one other action can be taken to elevate the wisdom of bright young people. After having a look at these creative and critical thinking strategies, which are derived from concepts in various disciplines, students can be prompted to carry out interdisciplinary explorations so they can discover concepts of their own that they can turn into new creative and critical thinking strategies. In so doing, they would be taking leadership roles in the development of their own wisdom and that of their peers around the world.

Concluding Thoughts

The moral dimensions of high ability deserve more attention in gifted education because without sufficient appreciation for the dynamics of ethical development, we run the risk of developing talents that will be used for evil purposes. Exposure to interdisciplinary theory and research on ethics can help scholars and practitioners in gifted education extend their understanding of the moral dimensions of high ability, especially the dangers of excessive particularism in identity formation. Such awareness can help them develop stronger mentorships and an affective curriculum that facilitates stronger personal and social awareness and adjustment. More broadly, it can help educators and gifted young people extend their thinking outward to grapple with nettlesome, real-world issues, such as economic exploitation, environmental devastation, ethnic conflict, and periodic genocide.

Of course, counselors and educators should recognize that paying attention to large-scale ethical issues can run counter to the wishes of parents and policymakers, many of whom are bound up too tightly themselves within dogmatic belief systems. This is a very real concern; nevertheless, the optimal moral development of the gifted requires us to expand the ethical and sociocontextual awareness of bright young people so they can understand the hidden influences on their own actions in the world.

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SECTION IV

Relationships

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CHAPTER 22

Lived Experience, Mixed Messages, and Stigma

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The purpose of this chapter is to look at what is known about the personal experience of being a student with gifts and talents (SWGT) in schools today. Relatively little research has reported on the "inner life" (Peterson & Ray, 2006) or "personal experience" (Coleman & Cross, 2000; Coleman et al., 2015) of being gifted. This chapter pulls together that literature. We draw from several streams of research: phenomenological research, social psychological research, and program evaluation. Three assumptions underlie this chapter: (1) When trying to understand the inner experience of others, neither can the individual be extricated from their social context, nor can emotion and intellect be separated from each other; (2) although context, emotion, and intellect can be pulled apart for analytical purposes, that practice overlooks that these areas cannot be walled off from each other in the course of living; and (3) students are active agents in their development and learning. At various points, individuals make choices that shape their development. At the conclusion of this chapter, the reader will have heard the voices of gifted persons and have an insight into what it means to live life as a SWGT in school.

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The Starting Point

SWGT are deviant by definition, not in a moral sense, but in terms of comparisons with other students' ability and motivation. SWGT possess characteristics or behave in ways that are outside the norm for their age and sometimes their gender, ethnic group, social class, or race, and this presents problems or complexities for schools. The norm is often referred to as the central tendency or most common characteristic of a chronological peer group. On a normal curve, where the norm is in the middle, including 68% of children, gifted children are on the extreme right as the curve slopes down to the baseline or abscissa. The small distance (height) between the curve line and the baseline indicates graphically that there are few children in that part of the curve. That fact influences their experience. Consequently, SWGT are deviants in comparison to others in that they are two or more standard deviations from the mean.

Paradoxically, although the SWGT are deviant, they are normal too. Using the same logic of the normal curve, everyone who falls under the normal curve is normal. In other words, variation is normal. Having some students with more and some with less of a trait is normal, as is the deviation around it. So, the SWGT are normal deviants, although we do not typically think of them that way. What is generally not known is that the normal curve is not symmetrical. The number of persons in the gifted range is greater than previously thought, and the number who depart from the mean is greater than three standard deviations (N. M. Robinson et al., 2000). In other words, the theoretical distribution underestimates the number of SWGT. That means thinking about children who are gifted as being normal is an appropriate place to start when dealing with a child. One should realize that SWGT may not be able to make sense of it, but they "know" of their differentness (Coleman et al., 2015; A. Robinson, 1990; N. M. Robinson, 1996). Individual children feel the differentness, but rarely do they apply the term *gifted* to themselves (Coleman & Cross, 1988/2014; Coleman et al., 2015).

Understanding the lived experience of being gifted in school requires comprehending school itself and the meaning of lived experience. As products of and practitioners or researchers in that world, we are familiar with it. Understanding the concept of lived experience means acknowledging that "a person's experience is what the world is to that person" (Coleman & Cross, 2000, p. 211). In this chapter, we focus on the SWGT's notion of experience in school and in life, not the adult's idea of how gifted children experience the world (Coleman et al., 2015). The literature is rather limited because most accounts of the experience of being gifted come from parents or adults. The chapter begins by defining personal experience and continues by discussing the social messages surrounding schooling and growing up in American society.

Personal Experience and Meaning

To learn about the personal experience of being a child who is gifted or talented, we must listen to what they say. One way to think about personal experiences is to use the term *voice* as a synonym. Understanding lived experience brings the voices of students forward to hear subtleties (van Manen, 1997). Voice in this sense is not only the direct words they say or write, but also the interpretation of the meaning children make of the world and their place in it. Finding meaning is an interpretive act, so individuals must be careful when they state what another person's words mean (T. L. Cross, 2003). Appreciating a child's meaning requires careful listening and multiple opportunities to revisit a topic or situation (Creswell & Creswell, 2018).

Social Messages

Adults know that their culture is filled with messages about how to think and behave. Children learn this early, too. They are aware that their world is filled with social messages about how to act and to be. These messages are "ought" expressions. They express values and expectations and have ambiguous meanings. Interviews with students yield examples of common messages: Do your best, do the right thing, have many friends, be modest, respect others, the way you look is important, everyone has value, get good grades, be smart, and act like a man/woman (Coleman & Cross, 1988/2014).

What do the social messages mean from the perspective of the child? A general consensus exists about the power of social messages in schools; children regard them as expressions of what constitutes acceptability and social attractiveness. Supposedly, if a child acts according to the social messages, they will be successful in school, and others will regard them more highly.

Any single message comes with multiple meanings depending on numerous factors, such as school setting, ethnicity, gender, social class, and so forth. Unluckily or unsurprisingly, these messages are often contradictory and have subtle shades of meaning. Children have to make sense of these messages as they navigate schools and growing up (T. L. Cross et al., 1991/2014).

There are moments when the consistency between message and behavior is violated. Young children pick up on this quickly. A child overhears a parent turn down an invitation by stating they are busy doing something that the child observes they are not doing. A child witnesses that the winning science fair project was done essentially by a friend's parents. A child learns about global warming

and has trouble sleeping because they are confused by the fact that many people deny climate change while the science so strongly supports it. These are examples of how the messages of "be honest," "tell the truth," and "do your own work" are falsified. Although all children notice the contradictions, SWGT often worry about the inconsistencies and can be sensitive to the disjunction between what peers and adults say and do (T. L. Cross, 2018; A. Robinson, 1990). This heightened awareness makes their experience of living different than that of their peers (T. L. Cross et al., 2003). Significantly, the child has a choice in how to respond to those messages.

Role Messages Ascribed to Students With Gifts and Talents

Social messages are not only general statements, but also more specific statements applied to particular groups. These messages, again, refer to ethnicity, gender, social class, and so forth. Giftedness is another such group. These restricted messages add a new layer of potential conflict into the lived experience of children. SWGT must contend not only with the messages that everyone does, but also with those messages intended (or implied) specifically for those accorded membership in the gifted group. The child lives amidst multiple messages (J. R. Cross et al., 2018, 2019).

Being recognized or labeled as gifted confers expectations on the child from adults and others (Berlin, 2009; J. R. Cross et al., 2019). Students have indicated an awareness of their giftedness at an early age. In their accounts they also reveal consciousness of possible consequences of being known as gifted (Coleman, 1985; J. R. Cross et al., 2018, 2019; T. L. Cross et al., 1991/2014). As two of these students described:

- But, also the other kids look up to you and they put a lot of pressure on you. Like, if you don't do as well, they will like, I guess, they won't see you as smart as you really are.
- That's why I don't think it's good to be the best, even though I want to be, because everyone expects a lot and when you don't reach it, people are disappointed. (J. R. Cross et al., 2019, p. 229)

It is difficult to separate the impact of being gifted from that of being officially identified as gifted. Here are two conditions—gifted with an official label and gifted without a label. The lived experience of a child is likely to be different in each condition. Unfortunately, our information is based on identified (i.e., officially labeled) gifted. Thus, easily identified children—White, advantaged—are those we know the most about. They know relatively little about other SWGT.

Labels have a perplexing effect. Most research on the effects of the gifted label was conducted in the 1980s and 1990s, when gifted programs were becoming more common in schools. The studies tended to be survey-based and concurrently examined phenomena such as self-concept and self-esteem. A. Robinson (1990) fittingly described the dilemma faced by students tagged with the label. Labeling brings perceived advantages and liabilities from the perspective of the student. Although students in special programs noted that the label increases opportunities to be in a more appropriate academic experience (Coleman et al., 2009; Hertzog, 2003; Kerr et al., 1988), some also felt the effects of negative stereotyping and the high expectations that come with the label (Berlin, 2009; A. Robinson, 1990). Obviously, these studies help us to understand the possible effect of labeling, but they do not get closer to the lived experience of being a SWGT. Few studies are based on prolonged conversations that give children an opportunity to explain the effect. Although there are no studies of children's awareness of giftedness before being labeled, there is a retrospective study of lived experience from elementary school children attending a magnet school (T. L. Cross et al., 2003). The authors reported that children had:

> normative awareness of differences across students. For example, the youngest coparticipants [grades 1–3] described times when they were aware of their abilities to do something, such as read, while noticing that other students either could not or struggled when trying. These descriptions were often of friends outside their class. The older coparticipants [grade 4–6] were quite articulate about other students' academic and social strengths and weaknesses in their magnet class. Their descriptions of students from the heterogeneous classes also revealed beliefs about other (nongifted) students' strengths and weaknesses. (T. L. Cross et al., 2003, p. 214)

The Effects of Being Gifted and Not Being Labeled

Children have trouble making sense of their high ability in situations where adults do not recognize it. In some instances, children with remarkable levels of ability are unrecognized and work to make themselves like their peers. Gross (1992) conducted a longitudinal study and compiled the life histories of 40 children with IQs between 160 and 200. Thirty-one of the children "spent, or are spending, their elementary school years working through a lockstep curriculum in a heterogeneous classroom without access to other gifted, even moderately gifted, students" (Gross, 1992, p. 92). The results indicated that the children had unre-

Table 22.1
Behaviors of Students With Gifts and Talents Subject to Misinterpretation

Child's Behavior	Positive	Negative
Asks many questions	Interested, curious	Seeks attention, dominates class
Offers many answers	Has much information	Impulsive, ignores others
Prefers to work alone	Independent, self-directed	Socially awkward, unconfident
Becomes upset by how others are treated	Sensitive, caring	Overly emotional, busybody

alistic notions of their academic abilities, usually doubting or having low regard for those abilities. For example, a girl stopped reading and writing and pretended to be at the level of her preschool peers. Another, a boy with voracious interests, ceased his independent learning and acted as if he had no advanced interests. Socially, the story is similar:

> The majority of children retained in the regular classroom have experienced extreme difficulty in establishing positive social relationships with their classmates. The strongly negative perceptions which they develop both of their own social skills and of their image in the eyes of other children are reflected in extremely low levels of social self-esteem. Over half the children in the study have social self-esteem scores at least one standard deviation below the mean. (Gross, 1992, p. 97)

Other retrospective life histories (e.g., Sanders, 1996) suggest that being unrecognized—not labeled—has effects on achievement and adjustment. On the other hand, if the abilities are recognized and treated, but not necessarily labeled as gifted, adjustment problems are more likely to be minimized.

Not being labeled gifted might make it more difficult for the gifted child because characteristic behaviors are subject to misinterpretation by others. In effect, the same behavior can be interpreted as positive in one instance and negative in another. Table 22.1 portrays four examples of children's behaviors and how they may result in opposite interpretations. This situation can be quite baffling to a child. The child is aware that something about them influences how they are treated. This fact is significant for understanding the lived experience of SWGT and the stigma of giftedness.

Stigma

Giftedness is stigmatizing. One might explain the background for the notion of stigma as "something about me bothers others and appears to interfere with the social relationships I want to have with others." Many, but not all, SWGT experience being gifted as stigmatizing and alter their behavior in accordance with this notion. Tannenbaum (1983) noted,

> the gifted are influenced by their peers', parents' and teachers' feelings about their abilities. If they are seen as mental freaks, unhealthy personalities, or eccentric simply because they are brainy or creative, many of them will avoid the stigma through conformity. Some would rather underachieve and be popular than achieve honor status and receive ostracism. (p. 466)

Stigma happens when a person is perceived to possess a tainted characteristic, trait, label, or behavior that disrupts normal social relations (Goffman, 1963). Most stigmas are visible (e.g., loss of an arm, walking with a cane), and some are relatively invisible (e.g., criminal record, gay, gifted). The latter kinds are powerful social messages that are not immediately evident, yet when revealed have the potential to modify typical social relationships. Stigma usually means negative reaction from others, but that need not be the case. It can bring benefits, too, as we shall explain.

Coleman (1985) proposed the Stigma of Giftedness Paradigm (SGP) by building on the work of Goffman (1963). Certain conditions must be present for the stigma paradigm to be operational in the life of the gifted child. These are: desire for normal social relationships, awareness that the knowledge others have of one's giftedness alters their behavior toward that child, and understanding that information about a child is subject to manipulation. Awareness comes in two forms. The first is cognizance that people often do not know of one's giftedness, and the second is that people change the way they act toward a person once they learn of their giftedness. "Subject to manipulation" means that the availability of information about a person is controllable in some instances, so one can manage that information to attain social goals. Thus, giftedness is stigmatizing because it has the potential to disrupt social relationships, and giftedness can be camouflaged in order to influence how others treat SWGT. Studies have shown that children are cognizant of the SGP and will manipulate information about themselves to attain normal social relationships in elementary and secondary schools, as well as suburban and rural schools (Coleman & Cross, 1988/2014; J. R. Cross et al., 2019; T. L. Cross et al., 1995; T. L. Cross & Stewart, 1995). Swiatek (1998) also reported

on the social challenges of giftedness and the coping strategies utilized by gifted adolescents to reduce perceived social stigma.

When a child is in different environments filled with social messages and expectations, the child may or may not feel different (Coleman & Cross, 1988/2014). Most do. If the child wants to maintain normal social relationships, they can decide to manage the information that others have about them, implementing strategies that fall within the continuum of visibility to control the information (see Chapter 41 by Mammadov, this volume). The strategies subsumed under the continuum are specific ways to achieve the goal of normal social interactions: High visibility is to make oneself stand out more obviously, invisibility is to hide oneself, and disidentifying is to engage in behaviors that apply to presumed nongifted groups, such as jocks, stoners, slackers, and so forth. Among the three broad categories, invisibility is the most often used strategy.

Evidence for the SGP in the lived experience of SWGT has been found in numerous studies, both through interviews and hypothetical scenarios (see Figure 22.1). Reducing their visibility through hiding their abilities, conforming to peers' behaviors, and even lying (J. R. Cross et al., 2019; T. L. Cross et al., 1991/2014) have been common themes. From this research, the idea that some students would lie rather than tell the truth in a situation that looks relatively innocuous (see Figure 22.1) implies that counselors must try to understand the situation from the perspective of the SWGT. Goffman's (1963) study of stigma offers explanations for where and when SWGT will be affected by SGP. J. R. Cross et al. (2019) proposed that SWGT should learn about the stigma, cautioning that "The challenge to adults is in how to teach children they are different, without making 'differentness' such a fixed part of their identity that they are uncomfortable with themselves" (p. 236).

The Lived Experience of Schooling

> I'm different you know; you show intelligence and you're outspoken, and people tend to isolate you and put a label on you.
>
> —SWGT in T. L. Cross et al. (2003, p. 203)

SWGT have mixed feelings about school. They want to learn; some are even consumed by it. The institution is not organized for advanced learning. Students are expected to develop in accord with their grade and age-mates. SWGT violate schoolhouse expectancies by presenting characteristics that stretch the traditional school structure: rapid learning, depth and abstractness of learning, intense interests, and asynchronous development. The first, rapid learning, means students

Figure 22.1 *Biology Exam Sample Scenario*

Setting: In the cafeteria line, several people from your class are discussing the biology exam.

Tracy: Man! Wasn't that test impossible? I must have spent 10 minutes trying to label that crazy diagram of the muscular system.
Chris: I blew the whole thing even though I studied really hard.
Marti: I probably failed it too.
Marti (to Jon): I bet you breezed through it and didn't even open the book to study.

Actually, Jon spent several hours studying and thought it wasn't a difficult test. If you were Jon, what would you be most inclined to say?

Biology Exam Responses

A: "Tests can be hard sometimes." (cover-up)
B: "Yeah, that exam was a pain." (lie)
C: "I probably studied as hard as you did, but the test wasn't too hard." (placate)
D: "I thought it was kind of easy." (truth)
E: "How long did you study?" (cop-out)

Note. From "The Social Cognition of Gifted Adolescents in Schools: Managing the Stigma of Giftedness," by T. L. Cross, L. J. Coleman, and M. Terhaar-Yonkers, 1991/2014, *Journal for the Education of the Gifted, 37*(1), p. 35 (https://doi.org/10.1177/0162353214521492). Copyright 2014 by SAGE.

master material faster. Depth or abstract learning means they are drawn toward the complexity and abstractness of content. Intense interest means students spend more time in some areas for long periods. Asynchrony means uneven development across domains, such as moral reasoning development being faster than emotional development (although both may be above average). These characteristics fuel learning and promote advanced development. The combination of asynchronous development, heightened emotional sensitivity, advanced moral reasoning, and information processing drive the gifted adolescent toward the desire for identity, intimacy, and achievement at a much faster rate than typical adolescents of average ability (Vanderbrook, 2006).

The Child Is Ready, but the School Is Not

In many classes, the child is ready to move on to more advanced learning but is inhibited by school practices. The plight of SWGT is seen most vividly in the description of students who attended a special school where the school is ready for them (Coleman et al., 2009). Responding to the prompt, "The School [a pseudonym] is like . . .," children from grades K–8 encapsulated their experience of being in a school with interesting, demanding, and faster moving curriculum. In grades K–2, students viewed the special school as being fun and games. These students had limited reference to other school experiences. By third grade, two children said, "You're in a whole other world of learning" and "Riding a roller coaster, but a really fun one." A fourth grader remarked: "A wonderful chance to soar to new heights." Two fifth graders commented: "Being in a beehive. School is always buzzing with activity" and "Being in Utopia because everything is just right." It is in grades 6–8 that the similes show the power of the special environment:

- Sixth grade: "Being on a beautiful marsh with dragonflies and water, I feel I can share my thoughts and feelings without being laughed at or judged" and "Being in a different world, a world apart from the people struggling with school. In some ways it is like a utopia . . . like a classless society."
- Seventh grade: "Is sometimes the last place I want to be, but I wouldn't have it any other way" and "Being in a small town where everyone knows each other and everybody has friends."
- Eighth grade: "Being an inch away from paradise and not being able to have it" and "Being in the 7th rung of the Inferno."

These quotes echo the findings of another investigation of students in a magnet school for SWGT (T. L. Cross et al., 2003). Our interpretation of these comments on the experience of the magnet school indicates what was missing in students' previous school experience. Notice how the images become more vivid as the students age, which we interpret as the increasing need for such a school. One should not draw from this that SWGT need to be in a special school; rather, we should be cognizant that gifted-friendly schools have qualities that elicit these thoughts. In other words, the school setting is a significant part of how children experience school (Coleman et al., 2015). Eddles-Hirsch et al. (2010) found that schools where SWGT's social and emotional development were thoughtfully planned for and incorporated into challenging curriculum were places that engendered SWGT's feelings of belonging and security.

Can I Be Myself in School?

The question "Can I be myself in school?" has much to do with how friendly the school is to the behavior of someone who is gifted. This is a clear case of context being a significant variable. I (Coleman, first author) initially became aware of this in a 1980 interview with a cerebral-sounding African American male adolescent who was attending a special summer program about the experience of being gifted. I expected to hear a tale of discomfort and disenchantment with his local urban school. Instead, he related a story of contentment and pleasure of being in a supportive school. The young man understood the stigma experience (spoken of earlier in this chapter) from prior school experiences, but stigma was not activated because the school was responsive to his perceived needs. This sentiment of belonging was also seen among middle school SWGT from low-income backgrounds, primarily African American, who felt supported and connected in their school communities, despite infrequently having their academic needs met (J. R. Cross et al., 2018).

The root of a gifted child's experience in school is captured by this phrase: "advanced development coming into contact with uninteresting, undemanding, and slow moving curriculum." This leads to particular problems that characterize the lived experience of schooling for children who are gifted: not being challenged, finishing early and waiting for others, lack of seriousness about learning among peers, being bullied, academic resistance, and living with a passion for learning.

Serious About Learning. In 25 years of interviews with gifted children in which they are asked to talk about if they feel different and, if so, how do they differ from their peers, the children have usually revealed perceptions that we paraphrase in this order: "I am not different really," "I am more interested in learning," "I am more serious than most of my peers about learning," and "I know what I want to do in the future" (Coleman et al., 2015; Coleman & Cross, 1988/2014; T. L. Cross et al., 1993, 2003).

A pattern is revealed in these statements. "I am not different" seems to be a denial of their high ability. "I am more interested in learning" seems to indicate that they like to learn new material. "I am more serious about learning" means they are more studious and willing to expend time learning. "I know what I want to do in the future" suggests they have a direction. The last statement is the least frequently heard of the four.

Taken together, these perceptions reveal an understanding of how SWGT see their peers in school. Essentially, SWGT separate themselves along this dimension of seriousness. It is significant that ability is rarely mentioned. We suspect that is because ability is too abstract an idea, and the term *gifted* is associated with beliefs

about giftedness that do not fit the individual, so they cannot be gifted. Peers are often perceived as simply not wanting to work hard (e.g., J. R. Cross et al., 2018) rather than as having less ability. Interestingly, SWGT's denial of difference does not preclude their sense of differentness from others, as we shall explain shortly.

Finishing Early and Waiting in Class. When a group is given a task to complete in school, students finish at different times. For SWGT, this happens more often than not. In fact, the most universal school experience for SWGT is sitting and waiting. The limited findings tend to defy conventional anecdotal thinking. In one school, SWGT in grades 1–8 were studied (Peine & Coleman, 2010). Three kinds of waiting were uncovered: school/classroom, instructional, and assignment. Instructional waiting is of interest here. It occurs at those times in the class when new material in the form of content or process is presented, and the SWGT already know the material or have learned it more quickly than others in the class. Cathy, an eighth grader, described it: "Most of the time we already know kind of what's going on, and we get things really fast, and the other kids are still trying to learn what they are doing" (Peine & Coleman, p. 229). It starts early. Mitzi, a first grader, talked about math and reading, "I already know all the problems" and "I know all the words" (p. 231).

Across grade levels, gifted students have notions of their personal rate of learning—they learn material faster than many others in the classroom. Rachel, a seventh grader, summed it up best: "The teacher says what we're learning, and we already know what to do, and we learn it, and we've got it all down and some of the others haven't gotten it, then we're ahead of them" (Peine & Coleman, 2010, p. 231). Forces in the classroom independent of the child's ability influence the amount of waiting, such as the textbooks repeating the material, teachers repeating the questions students know, misbehavior of classmates, and so forth. "Stagnant academic conditions" (J. R. Cross et al., 2018) result in frustration among students who are serious about their learning.

Students have purposeful and goal-oriented ways of living through the waiting when the teacher is presenting material they already know. Some strategies are obvious, and others are less so. In his seventh-grade class, David said, "I just kind of sit there and listen and see if there's anything that I can get out of it that I don't already know about it. I'd read ahead, or I'll be flipping through the textbook for the class" (Peine & Coleman, 2010, p. 233). Jennifer in sixth grade said, "I'd be just kind of watching and not completely paying attention" (p. 233).

Boredom was mentioned most frequently as an outcome of waiting: "It's boring just sitting there. I get bored. Sometimes, the beginning of class just goes on forever and ever" (third grader; Peine & Coleman, 2010, p. 233). An eighth grader said, "I just want the teacher to get done so we can go on. You already know the stuff, but the other people are trying to learn it and you can't advance" (p. 233).

Pacing was a problem for middle school students from both high- and low-income backgrounds in a study of barriers to achievement (J. R. Cross et al., 2018). Students in both groups gave examples of "stagnant academic conditions" when they were not learning. The students from high-income backgrounds were frequently frustrated by an inability to work at their own pace. One boy explained, "Especially in math and science, it's like I'm at a higher level than even the [advanced] classes, so it's like review, week after week after week and I'm never learning" (p. 116). One student from a low-income background described being allowed to sleep in class because "I'm too advanced. And most of the time there's nothing for me to do in math class. I finish everything" (J. R. Cross et al., 2018, p. 115). In contrast, some students find the pace they need in online educational spaces (Swan et al., 2015). One middle school student participating in a virtual learning lab designed for gifted students explained, "You can go ahead as far as you can and you won't get in trouble" (p. 308).

In Peine and Coleman's (2010) study, two thirds of the students talked about waiting as a negative experience. Yet they did not regard the experience of waiting as completely negative. The major finding was: "Waiting is boring; sometimes, waiting is fair" (p. 238). Students already knew the material, and they adjusted their thoughts and behavior to deal with the ways their teachers taught. They basically strived to give the appearance of being engaged. They looked at the teacher and tried not to draw attention to themselves. Reading was the most common coping activity (15 of the 16 students). As one fourth grader said, "If I didn't have a book, I might be looking around the room to see what my friends are doing or wanting the clock to hurry up so I wouldn't have to wait much longer" (pp. 239–240). The students mainly wanted to move on, but a significant number also regarded waiting as fair because people learn at different rates and everyone deserves to learn. Being a member of a mixed- or same-ability grouped class makes no difference in the lived experience of sitting and waiting. Students want to move on to new material. The worst situation for a child is to be in a class where the teacher insists that all students must be on the same page and will not let them read when finished.

Bullying

Bullying in schools has received much attention in recent years (T. L. Cross, 2018). Children who are gifted experience bullying, too, yet their experience may be somewhat different from those of nongifted peers. Peterson and Ray (2006) reported the results of 57 interviews of gifted students in a variety of school contexts around the United States in the sole study of lived experience and bullying. SWGT may have a "unique vulnerability to bullying" (p. 257) associated with

their differentness. One student remarked, "Anything that was different, [bullies] make fun of. The gifted are different" (p. 258). A second remarked, "I've never been bullied for being smart. Usually, it's for being different" (p. 258). A third commented, "You just want to yell at people, 'Just because I'm smart, doesn't mean I'm so different" (p. 258). Bullied gifted children recognize that external factors initiate the process and take responsibility for resolution. The gifted develop strategies to deal with the situation. "I don't want to talk about it [with anyone]. It's my problem," one student said (p. 259). Usually, they do not share their experience with peers or adults. They are silent. The importance of avoiding bragging or boasting was learned early by students in all five countries of J. R. Cross et al.'s (2019) study. They act to not call attention to themselves. A small incident can be very distressing to some. As time goes by, they cope with bullying and make peace with it. As one U.S. high school student explained, "It [name-calling] would hurt, so I just kind of like hid the fact from people. I can still do it [be correct], but I just keep it to myself now. I've just learned to keep it to myself" (J. R. Cross et al., 2019, p. 234).

Lest one forget, bullies can be gifted, too. Complaints of bullying-like behavior of students in grades K–3 by fifth and sixth graders were uncovered in a special elementary school (Coleman et al., 2009). Interestingly, this was not replicated in the special high school (Coleman, 2005). Peterson and Ray (2006) reported the motivations of three males in their own words,

> (a) Sometimes, you just don't like a person, and you don't want to hang out with him, even if your friends are, so you make fun of him. You find little reasons to make him appear bad. You just kind of exclude him. (b) You do it without thinking. Everybody is just around you, and this one kid does something out of the ordinary, and you make everybody feel good and laugh. You get caught up in the moment. (c) I'm just using him as a release point to take out everything that I've built up in me. I feel guilty because he doesn't do anything to me. (p. 259)

So, the gifted may be the objects of bullying and, in some instances, the purveyors of it. In the school "not being known" by others is seen by the gifted to be a part of the process. Once the bully gets to know a student, they will no longer be inclined to pick on them.

The Meaning of Challenging

Students who are gifted say they are not being challenged. What does that mean to them? Do students want more abstract courses or more difficult courses? Students rarely use the term *challenging* when referring to their direct school experience. When describing waiting, children did not call for more challenging work (Peine & Coleman, 2010). Students in elementary and intermediate special schools use the term *hard* to refer to the challenge of their classes. What makes a class hard is not a simple question to answer, except for K–2 children who do not recognize the term (Coleman et al., 2009).

The term *hard* does not have one meaning; rather, it is two states: constant and transitory. *Hard* as a transitory state is the expression most frequently attached to the idea of challenge. Encountering new, unfamiliar content and having unclear explanations by a teacher makes a class hard. As one stays in the class, the content becomes easier; challenge decreases. Hard is a constant state when one has neither the interest nor the "mentality for a subject" (Coleman et al., 2009). Some subjects are "hard to grasp" or one "does not really get them" (Coleman et al., 2009). Few interviewees made the point that a particular content was difficult for them. Variables that affect the difficulty of a course are clarity of directions, the amount of memorization (more is harder), and quality of the explanation. Online learning can be a challenge in itself, as one student claimed: "For me, FLVS is a lot harder than learning any high school course in a classroom. I think it is easier learning face-to-face instead of on the computer" (Swan et al., 2015, p. 311). Many of the SWGT in the online courses designed for them, however, found it to be a challenging and satisfying experience (Swan et al., 2015). One student in Coleman et al.'s (2009) study said, "Nothing is really hard, it is just that you do not know how to do it" (p. 8). There is an exception: when hard is combined with a term like *fun*. Physical education class was often called "fun and hard." Courses earning the "fun and hard" label are in subjects that may not be students' strength, but the teacher makes them enjoyable (Coleman et al., 2009).

For adolescents in a special high school, *challenge* is used more frequently (Coleman, 2005). The term refers to the struggle to learn a particular skill or subject in which they do not find immediate success. For example, one student used *challenge* in the context of the time she spent comprehending and analyzing literature as compared to the time required for her to reason through math problems (Vanderbrook, 2006). It would seem that ease of learning (a frequent condition in school for these children) does not occur and effort is needed to learn. The long-range implications of lack of challenge become obvious in postsecondary education where children meet challenging work. Students in a special school that provided challenge commented on their satisfaction with difficult work, after

years of being unchallenged: "I think that one fulfilling thing is that even though I try I still don't get straight A's" (Rollins & Cross, 2014, p. 24). Those who worry about esteem issues that can accompany a change to a more challenging academic setting (e.g., Marsh et al., 1995) may not recognize the fulfillment students experience with more difficult work.

Academic Resistance and Living With One's Giftedness

We have proposed that a student's commitment to their learning and development is part of the definition of giftedness (T. L. Cross & Coleman, 2005; T. L. Cross & Cross, 2020). Here, we have described the lived experience of children when their characteristics are met positively. The majority of children who are gifted thrive in those situations. However, for a small group, living with one's giftedness becomes an issue connected to further development when the person makes a choice to not exert effort.

My (first author) growing awareness of academic resistance came as part of a yearlong study of a residential public high school for the gifted (Coleman, 2005). In the course of my yearlong stay, I met some young people who did not seem to behave in the same way as most students. These students, usually boys, were successful, yet were not performing at the level their SAT scores would suggest. Unlike many of their peers who worked diligently, they flitted back and forth between doing excellent work, doing satisfactory work, and getting by with the minimum amount of work and still making deadlines. Milton (a pseudonym) described the situation when he and others like him reach a point where they have done enough even though they could do more. That moment is:

> when we say that is enough, we need to do something for ourselves. We move on to sleep, to play, to talk, etc. I value comradeship over grades and do work when it has to be done. I am willing to settle for a C and stay at the School. Pursuing our own interests over simply working to get good grades is our credo. Even in courses I love I will not do the required work unless I have to do it. Life should be fuller and more meaningful than it is here. Our notion is there is life after [this school]. (Coleman, 2005, p. 87)

I call Milton and his buddies academic resistors. They were not resisting learning, because they were active in following their interests. They appeared to be resistant to making a commitment to specialization and a rush toward careers, which was a

tacit goal of their school. They wanted to be at the school, but they did not want to be like their peers whom they regarded as misguided.

The second place where I (first author) have seen resistance to further growth is when play becomes serious learning. Gifted children find school easy. Nothing is really difficult, so they have limited practice in struggling to learn. As the content increases in complexity, the speed of learning slows down. It simply takes longer to master the content and skills and requires effort. Eventually, in order to go forward in a field or domain, a child reaches points where more effort is needed. To work through these moments requires becoming committed to a subject or domain (Bloom, 1985; Ericsson, 1996). Choices are being made to deliberately improve. This point is not simply a single moment, but rather a series of moments involving a choice about deliberate practice. These are the junctures where resistance occurs and selective achievement may happen, when the student pursues interests that diverge from the mainstream path of learning in an area or field (Speirs Neumeister & Hébert, 2003) or decides not to put forth the effort (Fliegler, 1961; Kanevsky & Keighley, 2003).

These two instances of academic resistance mean the student does not want to develop further in an area at this time. The role of the educator is not clear. Is it to keep students on track or to let their choices take them wherever they do? The philosophy of the professional will likely determine what occurs.

Living Passionately

The intense interests and heightened sensitivities of children who are gifted have also been called passions. Studies of adults, biographies, autobiographies, and the like document the passions of persons in various domains (Bloom, 1985; Coleman et al., 2015; Subotnik, 1995). It is common to hear stories of Vincent van Gogh's, Michael Jordan's, and Ruth Bader Ginsburg's passions. Obviously, their accomplishments involved long hours of learning and practice.

Winner (1996) coined the phrase "rage to master" to explain the behavior of children who have an unstoppable drive to do visual art. These students had to draw:

> Gifted children are intrinsically motivated to make sense of the domain in which they show precocity. They exhibit an intense and obsessive interest, and an ability to focus sharply. These children experience states of "flow," that is optimal states in which they focus intently and lose sense of the outside world. The lucky combination of obsessive interest in a domain along with an

> ability to learn easily in that domain leads to high achievement. (Winner, 1996, pp. 271–272)

This quote captures the power of passion. It also makes it clear that passion for an area is not an on-and-off thing; rather, it is a sustained activity. Case studies and life histories suggest the presence of passion. The lived experience of having a passion for learning is murky. The meager evidence suggests that passion in children is viewed by them in a matter-of-fact way in the early stages. Coleman and Guo (2013) searched for children with a passion for learning that continued for a year or more. They found eight children who were passionate about reading, acting, spelling, filmmaking, preaching, and doing mathematics. The children devoted significant portions of their free time, in some cases all of it, to the pursuit of their areas of interest. They put off other attractions, like spending time with friends or eating, to follow the passion. Betty expressed the sentiments of all of the interviewees:

> [Spelling] is one of the best things. It's almost like riding a roller coaster because you've [got] the exhilarating feeling like you're on top of the world when you start spelling all those words right and you figure out a word that you wouldn't know how to spell but you figure it out from the roots. It's just incredible . . . kind of insane because I give up going to parties, the mall, the movies (and soccer) to study. . . . (Coleman & Guo, 2013, p. 167)

Although some children deserve the label "passionate about learning," that descriptor overstates the situation for most SWGT. Many have a drive to learn, but not at the magnitude of their passionate peers such as Betty.

The gifted child, whether passionate or not, regards their interests and advanced development as natural, nothing special, an intrinsic part of oneself. However, the conventional view of adults (teachers, psychologists, and principals) is that the child's drive is generally externally directed, rather than internally; the motivation is a result of pushy parents, not the child. This view is remarkably resistant to change, although the literature on families and giftedness since early in the last century has repeatedly shown that SWGT do not regard their parents as pushing them forward (Bloom, 1985; Olszewski-Kubilius, 2002; Tannenbaum, 1983; Terman & Oden, 1947). Opportunities are provided, rather than directives that "you must do this or that." Of course, there are exceptions, but that is what they are. Mammadov et al. (2018) found that early college entrance students had great autonomy in their choice to participate in the program and to achieve in general. Although parent expectations and pressure affect some SWGT (J. R.

Cross et al., 2019; Mun & Hertzog, 2019), the most appropriate generalization or starting point for thinking about passion or heightened interests is that they come from within the child. As Betty has said, "it's just something that I have to do. Not that I'm forced to do, but it's just something in me that I need this" (Coleman & Guo, 2013, p. 167). Obviously, external factors play a part, but the more sustained the interest, the more likely that it comes from within. Interestingly, when academically talented adolescents come together, the interplay among the group of highly motivated learners accelerates the drive to learn (Coleman, 2005). The implication is that highly motivated learners need to be with each other.

Conclusion

By listening to the voices of SWGT, we can discover the lived experience of being gifted in schools. This chapter is the story of giftedness in school as told from the student perspective. Another story would have been the perspective of adults, which is the conventional way of presenting giftedness.

SWGT grow up in a world filled with social messages. Unlike other children, they must also contend with messages directed at their membership in an atypical group—the gifted. As they get older they realize they are different and do not know how to make sense of it. They learn that something about them is bothersome to others. They discover that as others who knew nothing of their giftedness acquire information about it, they are treated differently and normal social interactions are often distorted. They realize that information about them can be controlled by them to some extent. For those desiring normal social interactions, which is most of the group, the Stigma of Giftedness Paradigm becomes evident. SWGT engage in coping strategies on the continuum of visibility to make them more or less acceptable to their peers. Some SWGT go to considerable lengths to deny their giftedness and make choices that can inhibit future development.

SWGT have mixed feelings about school. Their characteristics test the age/grade structure of the school. In essence, their advanced development comes into contact with uninteresting, undemanding, and slow-moving curriculum. They are ready and want to move on to more advanced work, but the school is not ready for them in most cases. Their most universal experiences are waiting after finishing early or being introduced to content they know and waiting until something new or difficult appears. Waiting can be boring, and sometimes it is fair. They recognize that people learn at different rates and all deserve to learn. Boredom occurs most often when teachers do not permit them to do something else, such as reading or doing future assignments. SWGT avoid drawing the attention of the teacher in these moments.

The gifted are serious about learning and do not understand why their peers are not, too. The term *seriousness*, in their minds, distinguishes them from others—not in their ability, but rather in their efforts, because they see themselves as harder workers. SWGT can be bullied and bullies. They prefer to handle bullying on their own. They do not report incidents to adults and believe that "being unknown" (i.e., the bully is unfamiliar with who they actually are) engenders the bullying.

Most SWGT want to learn. Some are consumed by it and have a passion for learning, which means they are willing to give up or forego ordinary activities, such as going to the mall, eating, or playing with friends. Their internal motivation is often misinterpreted as being generated by others. When in groups with others of similar motivation, the individual drives are enhanced.

Being in a gifted-friendly school makes a world of difference to how SWGT experience schooling. There do not have to be major organizational changes in the school, but a ready school offers opportunities for students to move at their own rate of learning and follow their interests.

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CHAPTER 23

School Counselors and Family Relationships

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Identity, according to Josselson (1994), is psychosocial: "self and other; inner and outer; being and doing" (p. 82). But whereas some identities tend to be chiefly context-based—outside the district in which a school counselor works, for example, they may be more commonly recognized as a parent, spouse, or friend—a case could be made that the gifted identity transcends context, spanning (to some degree) all of the relationships in the individual's life. By and large, a gifted child is a gifted child, whether they are at home or in school. Given that school and home typically account for most of a child's life, a shared conceptualization of the gifted identity can prove invaluable in creating a sense of stability for gifted youth. By fostering relationships between the schools and families of gifted children, school counselors may facilitate that stability.

Researchers have deemed the family's role in developing a child's gifts and talents to be "very important" (Gulzhan et al., 2014, p. 406), "fundamental" (Olszewski-Kubilius et al., 2014, p. 201), and "the most critical component in the translation of talent, ability and promise into achievement for gifted individuals" (Jolly & Matthews, 2012, p. 259). As Olszewski-Kubilius et al. (2014) asserted:

> The family is the place where a child's initial sense of self is formed through intimate, intensive interactions with the significant people in his or her life . . . [T]he overall family envi-

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> ronment—in particular, the relationships and communication between its members—provides the foundation for children to develop both cognitive and affective components of prosocial behavior, such as social relatedness and empathy. (p. 201)

This chapter will examine the integral role of families in the lives of gifted children, with an eye toward providing school counselors the foundational knowledge and practical approaches necessary to facilitate more effective school-home interactions.

School Counselors and a Key to Gifted Competency

The job of a school counselor entails a broad array of responsibilities, ranging from college and career readiness to crisis management, as well as providing academic, emotional, and social support to students. Rarely, however, do counselor education programs devote much time to teaching students about the nature of and issues related to giftedness. Thus, to ensure school counselors can identify ways that policies, practices, and procedures impact student success *and* act as agents of change dedicated to the creation and maintenance of an environment conducive to successful growth and learning—standards required by the American School Counselor Association (ASCA, 2019)—school counselors must independently seek further education on giftedness. This may take the form of participating in workshops, attending gifted conferences, and/or utilizing print or electronic resources.

Fortunately, ASCA's (2019) competencies point to an additional—and essential—avenue of potentially positive learning: family interaction. ASCA directs school counselors to work with families to gather information on the needs of students and to share student success-enhancing strategies. ASCA (2019) also recommended facilitating trainings to enable families to avail themselves of a school counselor's expertise. Such notions bring ASCA's competencies in line with the findings of gifted scholars (e.g., Davis, 2014; Hermann & Lawrence, 2012; Matthews & Jolly, 2018) who stressed the importance of school-parent cooperation.

Davis (2014) called families "education's best allies" (p. 103). Because school counselors often serve as a primary point of contact between educational and family systems, one could reasonably attest they are ideally suited to capitalize on the capacity of families to serve as "cultural and intellectual informants" (Davis, 2014, p. 103). By virtue of their interpersonal training, school counsel-

ors possess the skills needed to "develop significant and personal relationships" with gifted families that may lay the groundwork for enhancing student success (Olszewski-Kubilius, 2007, p. 46).

To ensure such opportunities, Davis (2014) stated that schools must take steps to support families in becoming equal partners in the education and enrichment of gifted youth. Engaging families in such a concerted manner may help expand the support and resources for school districts (Davis, 2014). As Olszewski-Kubilius (2007) wrote, "The family is the most important support to the student. Building relationships with each family based on mutual respect and understanding is the most important aspect of working with parents" (p. 44). Thus, by serving as liaisons, and by listening to family members' experiences of gifted children and providing contextualizing information, school counselors may enable families to adapt in a way that benefits the gifted youth, the family system, *and* the school district (López-Aymes et al., 2014). The following text may offer some insights into both the familial experiences school counselors may expect to hear about and the types of support parents and caregivers may appreciate.

Understanding the Uniqueness of Gifted Families

Given the breadth of their diversity, the varied composition of families (e.g., single-parent, two-parent, etc.), and the wide-ranging relational approaches between parents and children, typifying families that include a gifted youth can prove exceptionally challenging (Gulzhan et al., 2014; Jolly, 2018; López-Aymes et al., 2014). School counselors could be advised to consider giftedness as an element of a family's intersectionality. Although research ties parental involvement to the school performance of gifted children, both in terms of achievement and behavior (Jolly & Matthews, 2012), the many diversity-related factors listed previously suggest that it is likely that parents of gifted children will possess differing perspectives on, attitudes toward, and histories with school systems (Davis, 2014).

Understanding intersectionality may aid school counselors in perceiving ways a gifted individual may impact family dynamics (López-Aymes et al., 2014). It may also increase the likelihood of forging deeper bonds between a gifted child's guardians and educators, which can contribute to the youth's success (Hermann & Lawrence, 2012). To become an ally and resource for gifted families, Renati et al. (2017) suggested that counselors should become conscious of their own prejudices. Thus, prior to exploring the assortment of experiences families face in caring for their gifted children, it could be worthwhile for school counselors to examine any preconceived notions they may have about "gifted parents."

Gifted Parents: Dispelling the Myths

Terms like *helicopter parent*, *tiger mom*, and *bulldozer parent* conjure images of parents famous (e.g., Joe Jackson, Lori Laughlin, Earl Woods) and not-so-famous who are deemed by some to have pushed their children too hard, too far, and/or too fast. This phenomenon may be attributable to a pair of underlying assumptions. First is the idea that all parents overestimate their child's capabilities—what Porter (2008) dubbed the "all parents think their child is gifted" myth. Second is the notion that a child's success hinges on a combination of effort and parenting. In an examination of the "tiger mom" perspective, Matthews and Jolly (2017) stated:

> If a child fails to achieve academic excellence, this is due to parents not fulfilling their duty in pushing their child to exert effort, rather than being due to any lack of ability within the child. It follows from this belief that parents may, and in fact should, use harsh childrearing tactics, including name-calling or threats, so long as these achieve the desired result of their child being the top achiever in every valued area. (p. 450)

According to Michelle Tanner (2019), the mother of a profoundly gifted child, the stereotypes of the hovering, overly demanding guardian present parents of gifted children with a near-perpetual "uphill battle" (para. 4). She wrote that, whereas the achievements of Tiger Woods and Serena Williams are routinely lauded by society, the standard response to "a 9-year-old who took the ACT 'for fun' and received high marks . . . is, 'Why are his parents pushing him?' and 'Just let him be a kid!'" (Tanner, 2019, para. 5).

Although there are, in fact, parents who employ intimidating tactics to bully teachers and administrators (National Education Association, 2007), there are also educators who may be prone to mistake parental advocacy for aggression (Cross et al., 2019). For school counselors, internalizing a view wherein a child's guardians are partners in the academic process may help sidestep both issues. As Shani Weber, mother of a gifted child, said, "If I'm seen as an adversary taking up time, we won't be partners. But as a parent, I play an integral role. All parents do" (National Education Association, 2007, para. 13).

By recognizing that families have different conceptualizations of giftedness, as well as varied approaches to and expectations of education, school counselors may be better equipped to serve as allies for gifted families. At the same time, counselors may be able to empathize with teachers' fears that parents may encroach upon their educational responsibilities—concerns that can lead instructors to

become protective, even defensive, of their professional domains (Cross et al., 2019; Rubenstein et al., 2015). Using their relational skills to engage with all involved parties may help school counselors foster a sense of sincere, mutual curiosity among parents and teachers, an interest Renati et al. (2017) suggested can lead to hope and change. This may, in turn, aid in facilitating a reciprocal understanding between the family and educational systems, defusing potential clashes while enabling parents to remain connected to their child's learning (Cross et al., 2019; Penney & Wilgosh, 2000; Rash, 1998).

Beginning the Journey: Families and Gifted Identification

According to Runco and Albert (2005), "All else being equal, family variables can make the difference between a fulfilled promise and dismal failure" (p. 355). The issue, unfortunately, is that all else is not equal. Black, indigenous, and other students of color are historically underrepresented in gifted programs, as are students from low-income families (Goings & Ford, 2018; Henfield et al., 2017; Olszewski-Kubilius & Corwith, 2018; Peters et al., 2014). This underrepresentation can be attributed to limitations of traditional gifted identification methods (Peters et al., 2014); lack of incorporation of local, culturally specific perspectives in gifted programs (Peters et al., 2014); and biases in teacher nominations (Jolly & Matthews, 2020). Such biases tend to accommodate students from high socioeconomic backgrounds, two-parent households, and White families (Jolly & Matthews, 2020). To address the matter, researchers indicated that schools must be more culturally responsive in their identification processes (Gentry & Seward, 2018; Jolly, 2018; Peters et al., 2014) and increase their use of parental information in identifying gifted students (Davis, 2014; Jolly & Matthews, 2020; Porter, 2008; Renati et al., 2017). Jolly and Matthews (2020) observed that parents' knowledge of their children "can be a great asset to schools, yet there has been little systematic guidance for parents or for teachers regarding how to convey this information effectively and what to do with it once it has been provided" (p. 343).

School counselors can champion greater inclusivity in gifted programs by implementing programs that educate parents about giftedness while increasing school personnel's familiarity with diverse cultural groups (Davis, 2014; Peters et al., 2014). Davis (2014) recommended broadly distributing literature on gifted education throughout the community and providing said literature in a variety of languages to accommodate students and families for whom English is not a first language. She also suggested forming a group of diverse parent leaders to serve as liaisons/trainers, hosting targeted special seminars (e.g., on twice-exceptional

students, culturally different gifted students), scheduling mutual advocacy meetings in which parents and school personnel can collaborate as advocates for gifted students, and involving community, faith, and civic leaders from various communities in discussions of gifted programs (Davis, 2014).

The literature suggests that such a broad, yet inclusive, approach holds promise. Parents and the support systems of students from underrepresented minorities may recognize signs of giftedness not evident in school settings, which can prove "especially important in identifying highly able learners who are Black, Hispanic, or English language learners" (Jolly & Matthews, 2020, p. 340).

Identification issues are not limited to race or ethnicity. Gentry and Seward (2018) called gifted students living in low-socioeconomic situations "the most invisible group in education" (p. 354), speaking to their vast underrepresentation in gifted and talented programs (Goings & Ford, 2018). Such invisibility extends to the research as well. Cross (2013) stated that much of the data in gifted education come from samples involving students of high-income families, and that "many researchers in our field do not believe that socioeconomic status matters" (p. 263).

Olszewski-Kubilius and Corwith (2018) cited several significant factors in the underidentification of gifted students from low-income backgrounds, including differential learning opportunities relative to income status, the reliance on ability and achievement test scores for admission into gifted programs, and underreferral by teachers. School counselors can advocate to address all of them. By taking steps to equip students from low-income families with resources, whether by instituting a culturally responsive curriculum or providing trainings to develop culturally conscious teachers (Goings & Ford, 2018), school counselors may aid students in developing strengths that "will help ensure that their potentials are not lost as they progress through school, and that they are not viewed as only average, despite having high potential that may not have been developed" (Gentry & Seward, 2018, p. 359).

Defining Giftedness

It is understood that parents represent a valuable resource in identifying giftedness (Davis, 2014; Jolly & Matthews, 2020; Porter, 2008; Renati et al., 2017), but they may not always know what they are seeing. It can be difficult, even frightening, for parents to watch as their child demonstrates behaviors that seem outside of what they consider the norm. By acquainting themselves with the concept of giftedness, as well as the roles giftedness can play in family relationships, school counselors can serve as a support system for parents adjusting to the unique needs

of gifted youth. Much in the way parents can serve as cultural informants for educational systems (Davis, 2014), school counselors may help parents in gifted families make sense of what's going on with their children. Providing information is key, and the better a connection the school counselor has made with a family, the more equipped they will be to incorporate the characteristics and complexities of the family into the resources they provide (López-Aymes et al., 2014).

Likewise, the more comfortable the family is with the school counselor, the greater the likelihood they will reach out with questions (López-Aymes et al., 2014). Having such a support can be critical, as the information furnished by school counselors may help parents avoid spiraling down the rabbit hole of misconceptions associated with giftedness (López-Aymes et al., 2014). Counselor support can aid parents in addressing their child's emotional and educational needs (Jolly, 2018), understanding educational assessment (Weber & Stanley, 2012), and recognizing the instructional needs of gifted children (Rotigel, 2003). In short, school counselors can contribute to parents' understanding of giftedness, which will assist them in becoming effective advocates for their children (Jolly, 2018; Rotigel, 2003; Weber & Stanley, 2012).

The Gifted Label

As they interact with the families of gifted children, school counselors would do well to remember that different families will handle the gifted label in different ways. In an effort to better understand the concerns associated with the label, Matthews et al. (2014) asked more than 100 parents of gifted children about their use of the term *gifted*. Two-thirds of the parents in the study acknowledged having difficulty with the label, and some opted to substitute "gifted" for terms they considered more acceptable, such as "quirky" (Matthews et al., 2014, p. 385). Although some parents reported using the label freely and easily when communicating with other parents, most deliberately avoided using "gifted" when communicating with parents of nongifted children (Matthews et al., 2014). The authors explained, "The majority of parents appeared to feel somewhat or entirely uncomfortable with labelling their children's giftedness, though they did not appear to have any discomfort with giftedness itself" (Matthews et al., 2014, p. 387).

Nearly two dozen participants considered the term *gifted* to be "emotionally loaded" (Matthews et al., 2014, p. 386), admitting they had been hurt and disparaged by parents of nonidentified children. In fact, a pair of mothers reported they had lost friendships with other parents whose children did not qualify for the gifted program (Matthews et al., 2014). The parents who did use "gifted" intentionally stated they did so for educative purposes, introducing the term as a means

of sharing knowledge about giftedness and to encourage advocacy (Matthews et al., 2014).

School counselors may use this research to inform their own efforts at educating the families of gifted children. Weber and Stanley (2012), for example, suggested timing parenting classes to coincide with the inception of gifted services. By connecting parents of gifted children and offering access to professionals and other resources, school counselors may help families better integrate giftedness into their family narrative.

Understanding Families' Challenges

To develop effective relationships between school and family systems, it is necessary to understand not only the home environments of the assortment of family types present today, but also the manner and extent to which the families interact with their gifted children (Davis, 2014). In terms of family configurations, the Federal Interagency Forum on Child and Family Statistics (2019) stated that the majority of children (69%) in the United States live with two parents, with a broad array of parental combinations (e.g., biological, adoptive, cohabitating, grandparent-present). The idea that more than two-thirds of all children have two caretakers in their homes may create a picture of consistently high levels of adult involvement, but factoring in the employment status of those parental figures can muddle the image.

According to the U.S. Bureau of Labor Statistics (2020), more than 50% of children have, or will soon have, all of the parents in their household working. What that means in terms of parent-child interaction will differ vastly from family to family, but it appears parents have relatively little time to devote to activities related to their children's education. On average, parents in a pre-COVID-19 world spent roughly 6 minutes a day working with their children on educational goals as a primary activity (U.S. Bureau of Labor Statistics, n.d.). Adding in the amount of time the average parent spent reading to or reading with their children raised that from 6 to 9 minutes (U.S. Bureau of Labor Statistics, n.d.).

Such statistics may enhance school counselors' conceptualization of the challenges and pressures, internal and external, that parents may face in raising gifted youth. On the one hand, a parent is often seen as "a child's first and most important teacher," and their involvement is linked to positive academic performance (Davis, 2014, p. 99). On the other, parents may lack the ability to spend as much time as they might like with their children, and may feel ill-equipped to provide them with emotional support (López-Aymes et al., 2014). To wit, they may "experience feelings of difficulty regarding the provision of educational resources

or intellectual stimulation needed to help in the development of their outstanding qualities" (López-Aymes et al., 2014, p. 55).

Overall, few studies have explored the daily issues experienced by caretakers of gifted children (Jolly, 2018). Given the cultural and socioeconomic limitations of gifted research (Cross, 2013; Goings & Ford, 2018; Olszewski-Kubilius & Corwith, 2018; Peters et al., 2014), a case could be made that even less is known about the experience of non-White parents of gifted youth or gifted-inclusive families with two working parents or from lower socioeconomic levels. The following sections will examine the intersection of giftedness with diverse identities, then provide a brief overview of the ways that common characteristics of gifted individuals may impact families.

Diversity Among Gifted Students

In addition to negotiating the possible changes in family dynamics associated with the presence of a gifted individual *and* advocating for their high-ability learners, caretakers of gifted children from diverse populations must also navigate school systems that may be unprepared to respond to their minority status (Cross et al., 2019). Stambaugh and Ford (2015) explained that such families "may be more susceptible to misunderstanding, a lack of fit, and even microaggressions" (p. 93). It stands to reason, then, that the presence of multiple minorities could necessitate a parent (e.g., the parent of a gay, gifted, Latinx student from a low-income household) to advocate for their child on multiple fronts simultaneously. To reduce that burden, school counselors can apply a holistic perspective on the identity of their students, helping the school/district understand, support, and celebrate the intersectionalities of all learners and reflect upon the educational system's contributions to these students' oppressions (Cross et al., 2019).

Race/Ethnicity. Gifted programs in the United States are historically composed of White and Asian American students whose families operate on higher socioeconomic strata (Davis, 2014), a reality that has impacted the literature of the field (Cross, 2013; Henfield et al., 2017). Although research concentrating on gifted students who are Black, indigenous, or people of color is expanding, little work has been done to date examining the impact of giftedness on their families. What studies have taken place seem to stress the essential nature of relationships to the overall success of gifted students from racial minorities (Davis, 2014; Henfield et al., 2008; Stambaugh & Ford, 2015). For example, Davis (2014) explained that parents and students from ethnic-racial minorities rely on interpersonal connections, including those involving extended family and society members, to positively influence the achievement of gifted learners (Davis, 2014). With that in mind, Henfield et al. (2008) suggested that school counselors should develop

opportunities and activities that enable gifted and nongifted Black students to interact (to normalize giftedness and increase awareness of and willingness to participate in gifted programs) but also "be vigilant" in their attempts to foster genuine rapport with gifted Black learners. According to Henfield et al. (2008):

> One method is to gain the trust of parents by illustrating to them how school counseling services can benefit their child. When school counselors earn the respect of parents, the parents are more likely to recommend school counseling services to their children. (p. 447)

However, the literature suggests parents' perceptions of racial socialization have negatively impacted interactions between families and schools (Davis, 2014), and may leave some family members from ethnic-racial minorities feeling "judged" by school personnel (Stambaugh & Ford, 2015, p. 196). School counselors may counter that effect by proactively and consistently informing all families of the benefits of gifted education (Henfield et al., 2008) and communicating the opportunities for gifted students from ethnic-racial minorities (Owens et al., 2016). They can advocate for the infusion of culturally responsive curricula (Goings & Ford, 2018; Henfield et al., 2008) and take the time to understand the complexities of the various cultural dimensions at play (Stambaugh & Ford, 2015). Such steps may enhance counselors' efforts to establish a productive working alliance with parents of gifted learners from ethnic-racial minority cultures (Stambaugh & Ford, 2015).

Socioeconomic Status. Ford (2007) suggested that students from low socioeconomic backgrounds may be considered the proverbial "stepchildren" of gifted education (p. 37). These students often begin their academic journeys with less preparation and, consequently, less opportunity than their more affluent peers (Gentry & Seward, 2018). Although students from low-income backgrounds may be found across all racial, sexual orientation, gender identity, geographic, and diverse ability boundaries, Olszewski-Kubilius and Clarenbach (2012) suggested that poverty's expressions differ according to the types of diversity present. This necessitates creativity on the part of school counselors, who must consider the contexts of both the students with whom they're working and the district in which they work. As Gentry and Seward (2018) illustrated, "afterschool enrichment programs that successfully serve low-income, urban students who live in close proximity to the school will likely prove problematic for low-income, rural students whose parents' work schedules and/or lack of participation prevent the students' participation" (p. 355).

According to Jolly and Matthews (2012), gifted-inclusive families from lower socioeconomic levels tend to utilize a broad network of support resources. Although such networks typically involve extended relatives and family friends (Jolly & Matthews, 2012, 2020), school counselors may endeavor to build a level of rapport with families that will enable them to join this support system. To do so, A. Y. Baldwin (2007) suggested an "attitude adjustment" that recognizes that "giftedness expressed in one dimension is just as important as giftedness expressed in another" and "all populations have gifted children who exhibit behaviors that are indicative of giftedness" (p. 24). By being aware of varying manifestations of giftedness and advocating for school institutions to use a broad variety of assessments to explore giftedness across domains (Gentry & Seward, 2018), school counselors may develop gifted programming that provides "an equal opportunity for students of all economic and ethnic backgrounds to develop their potential abilities" (A. Y. Baldwin, 2007, p. 24).

Twice-Exceptionality. According to L. Baldwin et al. (2015), twice-exceptional students demonstrate:

> exceptional ability and disability, which results in a unique set of circumstances. Their exceptional ability may dominate, hiding their disability; their disability may dominate, hiding their exceptional ability; each may mask the other so that neither is recognized or addressed. (p. 212)

These students represent a highly diverse group, given the varied possible areas, presentations, and levels of their giftedness and the many co-occurring disabilities they may possess (Ritchotte & Zaghlawan, 2019). Such wide-ranging miscellany may confound parents and educators alike (Ritchotte & Zaghlawan, 2019).

After speaking with parents about their experiences advocating for their twice-exceptional children, Besnoy et al. (2015) found that parents initially trusted schools to "provide the appropriate supports to address their child's disability, and protect their child's giftedness" (p. 115). That trust often proved misplaced, however (Besnoy et al, 2015), and when parents feel unable to obtain necessary help, they may resort to "extensive advocacy efforts" (Park et al., 2018, p. 203). This can lead parents to educate themselves on academic terminology, diagnostic information, and local, state, and national laws (Besnoy et al., 2015; Rubenstein et al., 2015). That reality suggests that "only twice-exceptional children with motivated parents who are educated enough to know how to seek out additional supports and who have the resources to do so . . . are likely to reach their potential" (Speirs Neumeister et al., 2013, p. 263).

To begin addressing these concerns, school counselors can seek information and training (e.g., education on federal laws pertaining to students with disabilities) that will enable them to better collaborate with parents in locating or creating suitable programming for twice-exceptional students (Besnoy et al., 2015; Rubenstein et al., 2015). Additionally, they should provide resources focusing on the characteristics and needs of twice-exceptional learners (Besnoy et al., 2015, p. 108). These may include materials aimed at assisting parental advocacy efforts, contact information for twice-exceptional support networks (Speirs Neumeister et al., 2013), or evidenced-based learning strategies parents may enact at home (Ritchotte & Zaghlawan, 2019).

Sexual Orientation and Gender Identity Status. SOGI, an acronym for sexual orientation and gender identity, recognizes that all people have different gender expressions, as well as interests, choices, and experiences that may be common or less common, given their biological sex (SOGI 1 2 3, n.d.). It is often used, as in this section, to refer to individuals who identify with gender identity or sexual orientation minorities (Cross et al, 2019; Khawaja et al., 2019). According to the National Association for Gifted Children (NAGC, 2015), gifted youth with diverse sexual orientations and gender identities "may not only feel different from other youth because of giftedness, but also may feel isolated due to sexual identity and/or gender expression" (p. 1).

SOGI status in gifted youth can impact social and emotional development, and contribute both to underachievement and extreme achievement (NAGC, 2015). SOGI youth may face harassment (GLSEN, 2019), anti-sexual-minority pressures (Friedrichs, 2012), and bullying (Kerr & Multon, 2015), which can contribute to substance use (NAGC, 2015), sexually transmitted diseases, and suicide (Friedrichs, 2012). For parents who have lived as heterosexual, cisgender individuals, providing support for gifted children who disclose their SOGI status can prove "challenging" (The Grayson School, n.d.).

School counselors can work to make learning communities more inclusive while simultaneously connecting parents to resources that may help them better relate to their gifted SOGI children. One place to start would be NAGC's (n.d.) Diversity Toolbox. The toolbox consists of downloadable chapters (https://www.nagc.org/resources-publications/resources/timely-topics/including-diverse-learners-gifted-education-program-1) containing helpful information for administrators, educators, and parents. It discusses the rationale for supporting gifted SOGI students, addresses components of gifted LGBTQ programming, and offers ways to address the social-emotional needs of gifted SOGI youth (NAGC, n.d.).

School counselors can introduce parents and educational colleagues to organizations dedicated to supporting and enriching the lives of SOGI individuals. GLSEN (https://www.glsen.org) offers a wealth of information on SOGI pro-

gramming, advocacy, and research, and PFLAG (https://pflag.org) is the largest organization for LGBTQ individuals, their families, and allies, with chapters across the United States.

In terms of SOGI-affirming practices, Sedillo (2016) and NAGC (2015, n.d.) recommended the following. School counselors can host "Safe Zone trainings" for parents and educators, provide parents with nondiscrimination policies governing LGBTQ issues, and widely disseminate information about antibullying efforts. They can work to ensure the use of gender-neutral language (e.g., "parent/guardian" instead of "mother/father") on district forms and in school correspondence, address students and parents/guardians according to their preferred pronouns, and advocate for the inclusion of SOGI individuals in the curriculum. Finally, by discussing SOGI status, whether in teacher trainings, parent workshops, or classroom guidance sessions, school counselors can increase the awareness of—and create safer, more inclusive environments for—gifted SOGI learners, as well as gifted students with SOGI family members.

Identifying Pressures on Parents

Parents arguably undertake one of the most impactful roles in a child's life. The behaviors parents model are absorbed by their household (Ben Artzey, 2020); they shape their child's environment and, through advocacy, can influence a child's educational and social experiences. Parents of gifted children may feel additional pressure. Efforts to foster the development of a gifted child can result in restructuring the family, potentially leading to alterations in priorities, financial expenditures, and overall esteem (Bourdeau & Thomas, 2002; Colangelo, 2002; Moon & Hall, 1998). Whereas all youth can struggle with social relationships and challenge authority, gifted children can do so to degrees that can intensify the parents' experience (Guthrie, 2019; Renati et al., 2017; Wood & Bailey, 2018). In short, parents of gifted children may feel added responsibility while already being overwhelmed by the requests and idiosyncrasies of their child (Guthrie, 2019).

Parents may struggle with maintaining realistic expectations when a child develops asynchronously, as it may be difficult for some to understand that a high intellectual ability does not mean a child has similarly accelerated emotional or physical capacities. Parents routinely hear statements suggesting that their gifted child is "performing beyond their years" or that their child "sounds so much older." This experience could lead a parent to overlook the fact that their gifted child is still a child. Meanwhile, the child may develop fear and anxiety as a result of the gap between cognitive understanding and emotional preparedness (Guthrie,

2019). Helping parents understand their child is not only a gifted child but also a child who may be emotionally unprepared for experiences can ease their minds.

From an educational perspective, a gifted child typically has unique needs parents often take it upon themselves to address (Jolly & Matthews, 2012). This may involve engaging in talent-spotting when children are young (Wood & Bailey, 2018) and taking great pains to select the best school for a child (Leana-Tascilar et al., 2016). The latter can encompass myriad complications, including relocation and financial strain (Renati et al., 2017; Wood & Bailey, 2018). Once a school is selected, parents often continually monitor their child's learning and seek additional enrichment opportunities (Jolly & Matthews, 2012). By recognizing the roads parents may have traveled, a school counselor can forge a better relationship with the guardians and identify themselves as a support who may help alleviate some of the concerns associated with raising a gifted child (Moon & Hall, 1998; Wood & Bailey, 2018).

In any family, power conflicts between parents and children can arise. With gifted children, however, those conflicts can take on a decidedly different flavor. For example, an individual parent may feel intellectually inferior to their child, or parental units may come into conflict when they have different perceptions of giftedness or achievement (López-Aymes et al., 2014). Parents can find themselves balancing conflicting feelings of being insufficient or unneeded (Leana-Tascilar et al., 2016) with intense responsibility. Education on normal developmental conflicts and appropriate levels of independence can be beneficial for parents.

Amid the numerous pressures that can be experienced by each member of a gifted household, it is important to acknowledge the wellness of the entire family. Parents are responsible for important decisions and coordinating resources while also being attentive to the emotional well-being of their child (Jolly & Matthews, 2012). It can take a toll. Although mental health issues should not be presumed to occur with the gifted population (Wood & Bailey, 2018), the possibility should be considered. Gifted literature often explores underachievement, perfectionism, and depression and anxiety (see Chapters 31, 38, and 39, this volume). In addition to awareness of these traits, parents often look for ways they can bolster their child's self-esteem and cultivate strong, well-adjusted, self-accepting children (Jolly & Matthews, 2012). When this holistic attention mirrors the work of a school counselor, a collaboration can be created that shifts the burden of responsibility from the parent to a partnership of support for the child.

Sibling Relationships

One cannot talk about the family without exploring the sibling subsystem, which is both independent of and influenced by the label of giftedness. Research offers contradictory estimations of the impact the giftedness label has on siblings. Although some findings suggest the interplay between gifted and nongifted children within a family can lead to problematic relationship dynamics (Bourdeau & Thomas, 2002; Colangelo, 2002; Renati et al., 2017; Wu, 2008), others have found that classifying one child in a family as gifted is not necessarily associated with negative effects on the sibling relationship (David et al., 2009; Tuttle & Cornell, 1993).

Studies often focus on one of two angles: (a) the relationship between siblings or (b) the effect of parents' behaviors and actions on sibling relationships. A study by Ben Artzey (2020) explored how parents maintain balance within a family when only one child is gifted. The researcher interviewed 40 parents who had at least two children between the ages of 4 and 17, one of whom had been identified as gifted. They found that parents used three techniques to maintain balance: bolstering the nongifted child by highlighting their strengths, identifying the nongifted child as gifted although testing had not indicted giftedness, and providing opportunities where the nongifted child's strengths were emphasized. The researchers were unable to determine whether such efforts were helpful to the sibling subsystem, but the study indicated that parents are likely to respond differently to *all* of their children as a result of one child's identification as gifted. Given the complexity of this dynamic and the strong developmental influence siblings have on one another, it would behoove counselors to explore the nature of sibling relationships within families of gifted learners. Whether those relationships are conflictual or supportive, counselors can incorporate these dynamics (as potential stressors or strengths) in an assessment of the gifted child.

Conclusion

Families are important in the lives of gifted children. Their role as identifiers, advocates, and support is undeniable. But, as has been shown in this chapter, even as families of gifted students understand their child best based on a shared history of experiences, they also struggle to comprehend the challenges associated with giftedness. As "one of the first educators that parents approach for support and guidance regarding their gifted child" (Wood & Bailey, 2018, p. 174), a school counselor can help to bridge the gap between alienation and understanding. By

listening and sharing, being a resource, connecting families to other services, and being hopeful and providing encouragement, school counselors can become the much-needed conduit connecting schools and families.

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CHAPTER 24

Peer Relationships of Students With Gifts and Talents

JENNIFER RIEDL CROSS

People are social creatures. Learning to live with others is of primary importance to human survival. Relationships begin to form from birth, first in the family, and then expand outward with development. In contemporary Western society, age-graded classes are the norm until high school. Developmental psychologists are well aware of the differential biological, social, and cognitive development of individuals, but schools must serve their students within the system. In nearly all cases, students with gifts and talents (SWGT) attend schools with their age-mates, who may or may not be like them emotionally, socially, or cognitively. The belief that this arrangement is most appropriate for all students has such a high priority that it even impedes the one method found by a wealth of research to be most effective for SWGT: acceleration (Assouline et al., 2015; see Chapter 28, Lupkowski-Shoplik and Behrens, this volume). Concerns about the social and emotional effects of grade-skipping have kept countless students from an education better suited to their cognitive abilities. Children spend their first years of development, from about age 5 to 18, together in schools. Their relationships with peers help them to understand themselves and how to live in society, regardless of any cognitive exceptionalities they possess. Many children learn to navigate their social world without difficulty, but school counselors can expect to see students of all stripes who face challenges in their peer relationships. SWGT

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have unique concerns affecting their peer relationships, which will be discussed in this chapter.

Students With Gifts and Talents and Peer Relations

The Popular Gifted

A number of studies have found SWGT to be popular among their peers (e.g., Cohen et al., 1994; Farmer & Hollowell, 1994; Gallagher, 1958/2015). Luftig and Nichols (1990) found that boys with gifts and talents were considered most popular (although girls with gifts and talents were least popular) in their sample of elementary SWGT (n = 64) and general population peers (n = 432). In Newcomb et al.'s (1993) meta-analysis, it was the popular children who had stronger cognitive abilities than average, neglected, or rejected children. Bellmore (2011) found that as GPA increased among elementary students, the likelihood of peer rejection decreased. "Model" late elementary-aged students, whose profile included above-average teacher ratings of academic ability, were socially prominent among their peers (Farmer et al., 2010).

The Not-So-Popular Gifted

In a study of 357 secondary students in the Netherlands, accelerated students had a higher likelihood than nonaccelerated students of being rejected, but most were considered average (Hoogeveen et al., 2009). Identified SWGT in secondary school were no more or less popular than peers (Peairs et al., 2019). In a study of 14–15-year-olds, Meijs et al. (2008) found that popularity could be predicted by an interaction between social intelligence and academic achievement, but not by achievement alone. As GPA rose among middle schoolers, so did students' unpopularity (Bellmore, 2011). Because most of the studies that did find high popularity among SWGT were carried out with elementary school children, these studies with conflicting findings indicate an age effect that may have been missed in earlier research. Achievement at an early age may be cause for admiration and liking, but perhaps, as Meijs et al. (2008) proposed, with maturity, other variables (including physical attractiveness and appearance) may have greater predictive value. Whereas young elementary students considered academic achievement to be a positive in peer relationships, by the fifth grade, high achievement had become a "potentially degrading stigma" (Adler et al., 1992, p. 176), especially

among boys, and athleticism had become more desirable. The transition to middle school can be especially taxing on social self-concept. Preckel and Brüll (2010) and Makel et al. (2012) both found higher social self-concept in early grades than in the grades following the transition to middle school.

Gender also plays a role in the popularity of SWGT. In Luftig and Nichols's (1990) study, girls with gifts and talents were the least-liked children. Solano (1976) asked students to check adjectives that described student profiles of male and female SWGT. Female SWGT were consistently described by their age-mates with negative terms, whereas male SWGT received positive descriptors. In a review of the literature on academic self-disclosure, Quatman and Swanson (2002) reported that there is significant conflict between academic achievement and social acceptance for girls, leading to a greater desire to hide academic success. Female SWGT, who made up less than a third of the total secondary school-aged sample in Lee et al.'s (2012) study, were significantly more socially confident than their male counterparts.

In addition to age and gender as confounds to the positive popularity-achievement relationship, level of giftedness is also relevant. In Schneider and colleagues' (1989) study, peer acceptance of SWGT was lower in classrooms where there was a greater difference in IQ levels between the gifted and control students. In her studies of SWGT of 160+ IQ, Gross (1998) reported significant difficulties in finding acceptance among peers who are often far behind them in cognitive and moral development. Peairs et al. (2019) found an association between peer rejection and higher standardized test scores. SWGT of high and moderate abilities, however, were equally accepted by peers in a summer enrichment program for students identified for their high ability (Norman et al., 2000). In other, more heterogenous settings, it can be an insurmountable challenge to find intellectual peers among age-mates—peers who can provide the emotional support that comes from similar concerns about life experiences.

African American and Latino SWGT face an additional challenge when they are identified as gifted, and peers may reject them for "acting White" (Fordham & Ogbu, 1986; Henfield et al., 2010) or being a "school boy" or "school girl" (Gándara, 2004). Although some research has challenged such constructs (e.g., Tyson et al., 2005), cultural pressures can operate against the desire to achieve academically.

Heterogeneous Gifted

Despite checklists and characteristics one may find to describe them, there is no single profile that represents all SWGT. Just as there are exceptions to any individual characteristic a SWGT may possess, there are also exceptions in their peer

relationships. In a cross-cultural study of SWGT in third to eighth grade, J. R. Cross et al. (2015) found that these students could be classified into three clusters based on their high, medium, or low self-concepts. Although it was the smallest group, making up just 15% of the total sample, the low self-concept group reported poor peer relationships. Similarly, a study of more than 400 honors college students identified 8% with a worrisome profile, who were highly introverted and neurotic with high levels of socially prescribed perfectionism and more frequent suicidal ideation than in the other profiles (T. L. Cross et al., 2018). The majority of these honors college students, however, had positive personality and psychological profiles. The few studies that have included such person-centered analyses tend to find a subset of students who struggle.

Numerous studies have found greater social difficulty among SWGT with exceptional verbal abilities than SWGT with exceptional mathematical abilities (Dauber & Benbow, 1990; Lee et al., 2012; Swiatek, 1995). One possible explanation for this is that verbal abilities are more apparent, potentially making students with these abilities an easier target for their norm-enforcing peers. A larger vocabulary can be used to articulate complex ideas beyond the capacity of average peers, whereas exceptional mathematical abilities need never be known to peers.

Anti-Intellectualism

In fact, there appears to be a general dislike of those with exceptional intellectual abilities, regardless of their ethnic, gender, or other differences (Brown & Steinberg, 1990; Howley et al., 2017, Mikami et al., 2010). The strong pressures against being a nerd, geek, or dork, particularly for adolescent boys, are prominently on display in movies, in books, and on TV (Anderegg, 2011; T. L. Cross, 2018). The academic (nerd or brain) crowd has low status in most secondary schools (Brown & Steinberg, 1990; J. R. Cross et al., 2016). The normative gender roles in many segments of Western society do not include intellectual pursuits and often openly disparage them. Objections to intellectualism (particularly when sought after by females) are found deep in Western tradition, from the myth of Pandora, whose curiosity about a mysterious box's contents leads to the unleashing of hardship upon the world, to the biblical expulsion of Adam and Eve from the Garden of Eden for eating the fruit of knowledge. Intellectual pursuit can lead to change, which can be frightening. Maslow's (1987) foundational security needs include a need for predictability. The biological, psychological, and economic costs of anti-intellectualism are everywhere apparent.

Enforcing social norms, the expectations for appropriate attitudes, beliefs, and behaviors of group members, is a large part of building group cohesion. The need for belonging that motivates much of human behavior (Deci & Ryan, 2000)

is intricately entwined with the recognition of and adherence to the norms of the group. Group norms may be positive or negative, and their enforcement can be through aggression, particularly when such behavior is within the norm (Mikami et al., 2010; Nipedal et al., 2010). A norm of average intellectual achievement ("not too" high; T. L. Cross, 2018) persists in many segments of American society.

Despite their apparent popularity, SWGT who deviate too significantly from any norm face exclusion from social groups. Tannenbaum (1962) found that adolescents most preferred brilliant adolescents who were also athletic and nonstudious. Brilliant students who were studious and nonathletic were liked least. Twenty-five years later, Cramond and Martin (1987) found the same results, but this time among teachers. This finding was replicated among Korean teachers (Lee et al., 2004). Even teachers preferred nonstudious, athletic SWGT over their more "bookish" peers. In 1954, anthropologist Margaret Mead wrote, "Teachers will tell kids 'Yes, you can do that, it's much more interesting than what the others are doing. But, remember, the rest of the class will dislike you for it'" (p. 213). SWGT in Western societies are constantly receiving mixed messages to achieve to the best of their ability and not to do so (J. R. Cross et al., 2019; T. L. Cross, 2018). Among the South Korean SWGT of a cross-cultural study (J. R. Cross et al., 2019), messages were less likely to be mixed, with peers and adults encouraging students' best efforts. The forced-choice dilemma between "the pursuit of excellence or the search for intimacy" of which Gross (1989) wrote is at least in part brought on by the pressure to submit to social norms. It applies to all members of that highly diverse population of "gifted," regardless of their other complicating identities. SWGT become well aware of the social norms in their surroundings, which may or may not be congenial to their exceptional abilities.

Challenges to Peer Relationships of Students With Gifts and Talents

Asynchronous Development

As mentioned many times in this volume, one of the primary characteristics of SWGT is that their gifts develop out of synchrony with their other abilities (see Chapter 17 by Silverman, this volume). This may be in a very specific way, such that their math abilities, for example, are highly developed, but in all other ways they match their age-mates' levels of development. Or it may be much more general, with moral and cognitive development far beyond their age-mates. Even in the general condition, however, a child's body is likely to be similar to that of

their peers, limiting them physically. The 11-year-old may be able to think like a stockbroker on Wall Street but will be quite noticeable in a group of actual stockbrokers. Creative SWGT who can imagine beautiful images or complex stories may not be able to realize them because their fine motor skills are not advanced equal to their imaginations. Gross (1998) described how this asynchrony can affect the child's sense of isolation. When peers cannot empathize with or maybe even understand SWGT, it is difficult to feel that they belong. SWGT are caught betwixt and between, with both adults and peers unable (or unwilling) to engage them as equals. The *belonging uncertainty* (Walton & Cohen, 2007) that ensues can be generalized to any social group.

Social Comparisons

In his social comparison theory, Festinger (1954) proposed that humans strive to outperform others in an effort to feel better about themselves. By comparing oneself to others doing better (upward comparison) and others doing more poorly (downward comparison), individuals are motivated to feel good about their performance or to try harder. SWGT are often at the top of their class, with no available peers to look up to and many peers available for downward comparison. The child in this situation experiences their social environment differently from their peers in the general population. Constantly outperforming peers can strain relationships, and being the frequent target of upward comparison (Exline & Lobel, 1999; Zell et al., 2020) can lead a child to make unexpected behavioral choices. Conformity, hiding, and even lying about one's abilities or performance are strategies that SWGT have engaged in the world over (J. R. Cross et al., 2019) to avoid being seen as "boasting" or to avoid making peers feel bad about themselves.

The Stigma of Giftedness

According to the Stigma of Giftedness Paradigm (Coleman & Cross, 1988/2014), all people desire normal social interactions. "Normal" is individually defined, as in the case of an extreme introvert whose normal interactions would be with only one person, in contrast to the extravert who may desire many more people to be involved for interactions to be considered normal. Regardless of what is normal for the individual, when possible, they will engage others with a goal of normal social interactions. As described by the social information processing model (Crick & Dodge, 1994), the child learns to recognize the cues that signal the presence of the stigma (e.g., comments about nerds) and will interpret what comes next in light of those cues. Students' goal of a normal interaction must take

the stigma into account. Individuals respond in ways that differ according to past experience and their own characteristics.

It is important to note that relatedness is only one of three universal needs in self-determination theory. People must also be autonomous—able to act of their own volition—and competent. Sacrificing any of these three needs can be detrimental to one's psychological well-being (Ryan & Deci, 2000). How to manage the social latitude one desires with the need to feel in control and competent in a situation is complex enough. Add to it exceptional competence, rejection of deviance by the other, and the controlling environment of most school settings, and the stage is set for feelings of "alienation and ill-being" (Ryan & Deci, 2000, p. 74).

An appropriate educational environment will ensure these self-determination needs are met. "Unprepared" schools met by "ready" students (Coleman et al., 2015) create a poor fit academically and emotionally, with potentially negative social outcomes. Segregated, exclusive gifted programs may result in more friends among some SWGT (e.g., Barber & Wasson, 2015), but fewer among others (e.g., Hamm, 2000; Hertzog, 2003). Students may feel sad about leaving their friends behind to attend gifted classes to which their peers do not have access, even as they enjoy being with like-ability peers (Adams-Byers et al., 2004; Moon et al., 2002). The high-income middle school SWGT in J. R. Cross et al.'s (2018) study were frustrated by the need to wait for peers to catch up or by what they perceived as peers' lack of seriousness about their studies. The girls were especially "wounded" by alienation from their peers. One girl explained,

> When there's that boundary line between a group of girls and somebody who's different from them, sure they might, like, consider you their friend, but when it comes to, like, social events they'd rather hang out with people that are very close to or very exact like them. When there is somebody that's different, they don't exactly feel like they're safe around that person. (p. 119)

If this girl's perception is accurate, we need to better understand the source of peers' feelings of being unsafe.

Potential Problem Areas

SWGT in general do not have lower rates of psychological well-being than their peers in the general population (Martin et al, 2010; Neihart, 1999), suggesting that most SWGT are able to satisfy their needs for relatedness, autonomy, and competence in schools. SWGT in Lee et al.'s (2012) study had high levels of

confidence in their social abilities. The average child identified for gifted services, however, has an IQ not very much above average (115 or so; see Chapter 5 by Bracken, this volume). There will be less difference in the intellectual functioning of these children than of their higher IQ peers, leading to less challenge in finding equals in their surroundings. The children and adolescents at greater risk socially are those exceptionally gifted or with multiplicative conditions (i.e., race, gender, language, socioeconomic status). Other SWGT may appear more like their general population peers in difficulties with peer relationships.

Aggressive children are frequently rejected by peers. SWGT may be aggressive for many of the same reasons that other students are aggressive, or they may develop an aggressive response as a result of frustrations brought on by their giftedness. Aggressiveness is sometimes rewarded by peers, who perceive aggressive classmates as popular even though they are not liked (Parkhurst & Hopmeyer, 1998; Peairs et al., 2019). Here, too, social norms play an important role. Scholte et al. (2010) reported that bullies were chosen as popular in classrooms with a permissive attitude toward bullying, but they were not popular in classrooms where aggressive behaviors were not allowed. Peterson and Ray (2006) found that SWGT were victims of bullying at rates similar to their general population peers. They also discovered that 28% of the SWGT in their eighth-grade sample (n = 432) had actually been bullies. Teachers were least likely to name SWGT as bullies, although SWGT who had aggressive friends were most likely to be named as bullies by their peers (Estell et al., 2009). Simply having high intellectual ability does not make one virtuous (see Chapter 21 by Ambrose, this volume; Tirri, 2010).

Argumentative or frequently disagreeing children are often not liked (Smollar & Youniss, 1982). Children with exceptional intellect may see consequences of actions their peers cannot predict and argue against behaviors for that reason. They may have knowledge about a situation their peers do not share, such as rules of a game. It is easy to imagine how children with greater actual knowledge could come, in time, to believe that their opinions are also of greater value than that of their peers, leading to difficulty in peer interactions—although Gross (1998) argued that they are more likely to find fault with themselves for any such difficulty. Counselors may need to teach perspective taking and encourage patience with peers who are less developed: "The highly intelligent child must learn to suffer fools gladly—not sneeringly, not angrily, not despairingly, not weepingly—but gladly, if personal development is to proceed successfully in the world as it is" (Hollingworth, 1939, p. 586).

Emotion regulation is critical to developing social skills, as children poor in emotion regulation are often rejected by peers in early childhood (Semrud-Clikeman, 2007), robbing them of opportunities to engage in social interactions

from which they could learn better skills. Parents of SWGT, astounded at their child's advanced cognitive abilities, may not recognize the need to teach them how to deal with their emotions. Counselors may need to fill this void, especially among younger students.

Children who cannot negotiate a compromise with peers are often not accepted (Putallaz & Sheppard, 1990). A heightened concern for fairness and justice, common among some gifted individuals (Piechowski, 1997), may make it difficult for some SWGT to negotiate with peers who have less concern for equitable outcomes. Many social skills, including the ability to negotiate during conflict, develop when children play with their peers. Parents may be so focused on the cognitive development of their SWGT that they downplay the importance of, or even deride, play with peers who may not be equally advanced. Adults often forget that SWGT are children first and need experiences with peers to develop their social competence. Children learn social skills when parents or more knowledgeable others (Vygotsky, 1978) give them advice about behaviors in social situations. Parents begin by telling children how to behave, but over time they ask the child to think about consequences of their behavior (Semrud-Clikeman, 2007). SWGT who are so competent in other ways may encourage their parents to think that they already know what to do and, thus, might not get instruction that they desperately need.

Giftedness can be a barrier to positive social interactions, but not if one learns how to manage information (Coleman & Cross, 2005). Coping strategies that address the stressful situation directly (problem-focused strategies), such as hiding one's giftedness from peers or becoming active in extracurriculars, are positively associated with self-concept (J. R. Cross et al., 2015; Swiatek, 2001). Emotion-focused strategies, which attempt to reduce the negative feelings brought on by the stressor, are negatively correlated with self-concept. Denying one's giftedness is an emotion-focused strategy. Students who did not acknowledge an influence of their giftedness on friendships were more likely to say they were not accepted or liked by peers (Swiatek, 2001) or to have poor social self-concepts (J. R. Cross et al., 2015). No matter how much a parent may tell a child that their giftedness does not matter in social situations, personal experience must be the guide. Rather than ignoring the likelihood that one's giftedness has an effect in social situations, being aware of potential complications caused by ability differences may lead children and adolescents to look for healthy ways of approaching those situations.

Counseling Students With Gifts and Talents Who Have Peer Relationship Difficulties

Counselors are likely to see SWGT who have difficulty with peer relations when these are impinging on their academic performance or on their psychological well-being. These students will need help in dealing with few or no friends, poor-quality friendships, or bullying. In many cases, the resolution to these problems will be the same as those recommended for all students. Counselors must be aware, however, of the problems described here that face SWGT uniquely (Coleman et al., 2015; J. R. Cross & Cross, 2015; J. R. Cross et al., 2018, 2019).

Despite their outstanding abilities in other areas, SWGT who have difficulty with peer relations may need support in any of the steps of the social information processing model (Crick & Dodge, 1994). They may need practice in encoding social cues, interpreting those cues, figuring out what their goal is in specific social interactions, constructing and choosing a response, and enacting their response appropriately. Direct teaching of these skills, along with practice to help students respond automatically, may be required for even the brightest (maybe especially the brightest) students of all ages. Studies of rejected children found that they "begin with waiting and hovering and then move too quickly to high-risk tactics on entering a group of peers" (Newcomb et al., 1993, p. 120). Observation of the child's behavior among peers may be necessary to learn how they are attempting to make friends and where things may be going wrong in that process.

Secondary students exploring their social terrain may test the different crowds (J. R. Cross et al., 2016), trying on different clothing styles and perhaps different academic values, to the dismay of parents and teachers. Adolescents are motivated by their needs for relatedness, autonomy, and competence. As they attempt to make friends, students may exert their independence from parents and teachers and may be satisfied that they can perform academically without doing so right at the moment. Counselors can suggest constructive ways to meet the need for belonging, such as special schools or summer camps for academically advanced students, where greater opportunities exist to meet intellectual peers. Extracurricular activities can give SWGT an opportunity to socialize with peers of varying academic abilities who have common interests. Friends who share common interests need not be of the same age. Older friends can sometimes be a great boon to SWGT, in part because of their more similar cognitive development, but also because of their more advanced social skills. They can act as a guide in social situations with which the younger SWGT has no facility. Grade-skipping has been strongly supported as a method for meeting academic needs of SWGT

without the predicted negative social implications (Assouline et al., 2015; Gross, 1989). Younger friends can also be a good match for some SWGT. They may be on equal footing emotionally and may have fewer expectations for social acumen than the age-mates of the SWGT.

Having few or no friends may not be reason for concern. Neglected children in early grades did not have poor long-term outcomes (Parker & Asher, 1987) and were well liked by teachers, perhaps due to their school motivation and adult orientation. Although there is not research to clarify how many SWGT fall in this category, it is reasonable to assume that some students who are ignored by their peers are gifted. Talented teenagers spent more time with family and in solitude and less time with friends than their average peers in Csikszentmihalyi et al.'s (1993) large-scale study. The talented teens' time spent alone was significantly higher (5 hours more per week) than their average peers, and they enjoyed this time more as well. If these students do not have presenting problems, a lack of peer relationships may not be an issue.

Addressing Anti-Intellectualism

Counselors may be in a position to affect the school-level norms against intellectualism. School-level norms can be effective in countering negative social group norms (Nipedal et al., 2010). Public honoring of high achievers should be done with caution to avoid establishing a competitive rather than cooperative environment and what Exline and Lobel (1999; Zell et al., 2020) described as the "perils of outperformance." Mead (1954) recommended allowing SWGT to pursue their academic passions inconspicuously and making clear the difficulty of their work. Academic teams can parallel sports teams in their visibility at regional competitions and the honor they bring to the school. Fostering a respect for intellectual pursuit should be a high priority and as much as possible an integral part of students' daily experience. Epithets that express contempt for either end of the ability continuum should be discouraged. Love of learning, flexibility in thinking, and challenge to what is known by authorities (including teachers and administrators) should all be encouraged in a school that values academics. Anti-intellectualism should be confronted.

At the same time that anti-intellectualism is being challenged, teachers in particular must be aware of their own attitudes toward the different cognitive ability levels of students in their classroom. Mikami et al. (2012) found that teachers who emphasized the academic status hierarchy of students in their class (responding positively to prompts such as "I point out students who do well academically as a model for the other students" and "I encourage students to compete with each other academically") reduced students' liking of one another over the school year.

SWGT who are already challenged to make friends among their peers are not helped by teachers' behaviors that draw attention to their abilities relative to peers. One middle school girl reported that she "stopped performing when teachers publicly read out students' grades: 'I was kind of happy [with her A+], but I don't like it whenever teachers do that because it kind of makes me more of a target for kids to pick on me and call me names'" (J. R. Cross et al., 2018, p. 117). Teachers who are attuned to the social dynamics in their classrooms promote a more positive classroom climate (Farmer et al., 2019). Teachers were sorely lacking in their understanding of the social and emotional reality of their students in a study of high school freshmen (Vialle et al., 2007). Although they believed their students were well-adjusted with no emotional problems, their students reported feeling intense isolation and sadness, potential precursors to more dramatic emotional difficulties. Teacher training should include a social and emotional component to address the concerns of all students, including SWGT.

Classroom activities also can affect an inclusion norm. In one study, students who were engaged in a group math task were told in one condition that the purpose was to "learn and improve" (mastery groups) and in the other to "see who was 'best' at math" (performance groups; Yamaguchi, 2001, p. 676). Not only did the mastery condition groups perform more effectively on the task, but they also had more prosocial leadership that led to group cohesion and enjoyment. In the groups under the performance condition, one student emerged to dominate the activity, leaving the other members frustrated and resulting in ineffective strategies to solve the task. For the most positive social and academic outcomes, teachers should avoid structuring activities for performance and encourage learning for mastery. Their attunement to students' social experience is critical to creating a positive environment (Farmer et al., 2019). To encourage peer inclusion in the classroom, SunWolf and Leets (2004) recommended activities such as "(a) storytelling and peer modeling; (b) behavioral journalism; and (c) co-constructing classroom inclusionary rules" (p. 217). When done well, fostering interdependence among students in cooperative classroom activities has positive effects not only on peer relationships but also on achievement (Roseth et al., 2008; Chapter 30 by VanTassel-Baska and Brown, this volume).

Conclusion

SWGT, especially in their early years, tend to be popular among peers. Subsets of the heterogeneous gifted population, including those who are exceptionally gifted, females, and students outside the mainstream, may have greater difficulties with peer acceptance. Problems with peer relations may be similar to

those among their peers in the general population, but SWGT may have missed important opportunities for social skills learning due to their advanced cognitive development. In order to have normal social interactions, they may use coping strategies, including conformity or hiding their giftedness, to fit in. To help SWGT in developing positive peer relationships, counselors may need to teach social skills directly, recommend opportunities that allow SWGT to be with intellectual or emotional peers, encourage teachers to be sensitive to the social and emotional needs of their students, and work against anti-intellectual social norms in their schools.

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CHAPTER 25

Gifted Students and Their Teachers: Relationships That Foster Talent Development

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Imagine a former high school English teacher connecting with her students over a holiday break. She lives in a rural community in the South but now travels extensively for her job as an educator in an online school. Although she sees former students in the supermarket or at the hardware store in her hometown, she occasionally organizes something more deliberate. Over a long Thanksgiving weekend, she invites several of her former small-town high school students who are on a short break from college to her home for afternoon tea—a ritual form of socializing. The conversation touches on topics that a diverse group of adolescents and young adults find fascinating—social networking, filmmaking, the joys of physics, high school events from the past, the latest technology, a good book, clothes—but one interchange concerns the relationships that develop between teachers and their students. The conversation works its way around to students returning home to visit teachers who "connected" with them. The connectedness usually begins during class, but the students feel that the connected teacher continues to take an interest in them when they are no longer in a formal classroom experience. For this group of gifted students, the teachers who fostered deep and long-term student-teacher relationships outside the classroom as well as in the school make all of the difference. For many students with gifts and talents, a supportive relationship with a teacher is crucial. Although this account references teacher-student engagements within a face-to-face setting, increasingly prevalent

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online education environments don't make this statement any less relevant. In fact, remote learning and the circumstances that necessitate it may make this relationship even more significant. Tea and conversational get-togethers have an online equivalent. Just as teachers and counselors may need to adapt to this different mode of interaction, so too will their preparation, professional development opportunities, and the resources they need to be successful.

This chapter sets the context for examining the relationship between talented students and their teachers by summarizing what teachers should know and be able to do with respect to building relationships with and for their talented students. Second, we examine selected literature on gifted students' reported preferences about their teachers and on teacher attitudes toward and beliefs about gifted students. Third, we identify common issues that counselors may encounter in schools concerning the relationships between talented students and their teachers.

Teachers Who Develop Talents

Teachers are important to the development of talents (Robinson, 1994). Research, best practice, and experience support this assertion. Some of the most iconic literature on the relationships between high-ability learners and their teachers come from the studies of peak performers and highly accomplished young adults. These individuals tend to acknowledge the role of individual teachers in the development of their talents and the successes they achieved (Arnove, 2010). Through interviews of master teachers, Arnove (2009) noted they were often accomplished in the domain in their own right. According to Arnove (2009), these teachers were characterized by "an x-ray vision" that allowed them to personalize their work with each student, by knowing just the right moves to make in order to lead the student to the next level of performance or understanding. Although many of these examples of student-teacher relationships occurred in a one-to-one coaching or mentoring context in music, sports, or other performance domains, Arnove and Clements (2003) also used a comparison group of classroom teachers who had been identified as outstanding by their administrators and by the faculty of a university school of education. Despite the differences in the teaching contexts between, for example, a violin teacher giving individual lessons and a middle school science teacher with a class of 25 students, Arnove (2009, 2010) observed commonalities. These teachers knew how to personalize their assistance to each student and connected with the student in important ways.

A quarter of a century earlier, Bloom (1985) and his colleagues had looked at the development of talent in sports (tennis and swimming), the arts (sculpting and piano), and academics (mathematics and neurology). Embedded in the larger

study of talent development, Bloom noted that these gifted young adults encountered important teachers along the way. At very young ages when they began in their interest area, they were buoyed by teachers who were warm and open, and viewed them as special. As they moved through school or through the course of their talent development, they encountered task master teachers who focused on developing good work habits and understanding of underlying principles. Finally, in the talent trajectory, the teachers were themselves accomplished individuals who often functioned as coaches or mentors for their students by helping them to develop their own unique style. The relationship between a master teacher and a peak performer may seem remote to many school counselors. How can the intense, personal relationship between two individuals over the course of several years be mirrored in the day-to-day school setting? In fact, although it should not be expected for all teachers to coach Olympic athletes, develop a competitive chess player, guide a practicing visual artist, or mentor a math whiz, educators should have expectations for what constitutes important learning environments for gifted students. A research base on teacher-student relationships that influence student engagement and achievement can inform educators' thinking about talent development (Dever, 2016; Roorda et al., 2011).

Standards for Teachers of Students With Gifts and Talents

Although most teachers do not have specialized preparation for working with gifted students, standards for teachers of students with gifts and talents exist in the field (VanTassel-Baska & Johnsen, 2007). The seven standards cover a broad range of teacher outcomes, including learner development and individual learning differences, learning environments, curricular content knowledge, assessment, professional learning and ethical practice, and collaboration (Johnsen et al., 2016). The standards most relevant to teachers' relationships with their talented students are Standard 2: Learning Environments and Standard 6: Professional Learning and Ethical Practice. Several of the outcomes within these standards focus on developing positive relationships between the teacher and their talented students. Specifically, Standard 2 focuses on teacher knowledge related to understanding stereotypes, awareness of culturally responsive instruction, and the influence of the social and emotional development of talented students on interpersonal relationships. Standard 6 focuses on the influences that foundational knowledge, perspectives, historical and current issues, and respect for diversity have on the education and treatment of individuals in school, community and society. These foci impact teacher-student relationships.

The teacher is one part of the relationship; the student is the other. Recently, the revised Pre-K–Grade 12 Gifted Programming Standards were released by the National Association for Gifted Children (NAGC, 2019; see also Cotabish et al., 2020). The six programming standards are configured as desired student outcomes and linked to evidence-based practices. One of the six programming standards is Standard 1: Learning and Development, which includes student outcomes based on self-understanding. A second standard, Standard 4: Learning Environments, includes student outcomes focused on personal competence, social competence, leadership, cultural competence, and communication competence. Table 25.1 summarizes the relationship between the two sets of standards with respect to Learning Environments: NAGC's (2019) Pre-K–Grade 12 Gifted Programming Standards and the NAGC-CEC Teacher Preparation Standards in Gifted and Talented Education (NAGC & The Association for the Gifted, Council for Exceptional Children [CEC-TAG], 2013). By examining the student outcomes related to psychosocial, social, and emotional development and the learning environments that affect development, we can trace the teacher knowledge and skills necessary to foster healthy relationships.

Creating an environment responsive to the way that talented students learn and make sense of their world is key to a successful teacher-student relationship. Talented students by and large relish authentic learning experiences that challenge them intellectually and that allow them to participate and contribute in ways that are meaningful, both personally and socially. At the same time, these students often experience difficulties as they navigate through a system of social norms and expectations not always conducive or responsive to the talented learner's particular needs. The 2013 NAGC-CEC Teacher Preparation Standards in Gifted and Talented Education acknowledge those challenges and offer teachers some guidelines for developing relationships that can foster invaluable lifelong skills. These standards illustrate that teachers who understand the importance of social and emotional development and how it influences relationships are themselves better equipped to develop effective relationships with their talented students who will be diverse in terms of demography, needs, and interests.

Building a healthy relationship with one's students requires that a teacher guide those students to a firm sense of and respect for self. Before students can fully develop their gifts and talents, they must first understand who they are, how integral their talents are to that identity, and the role those talents will play in the students' relationship with society at large. The Programming Standards (NAGC, 2019), much like the Teacher Preparation Standards (NAGC & CEC-TAG, 2013), speak to the importance of fostering individual student interests through authentic learning opportunities. This includes having high expectations for students while also encouraging academic and creative risk-taking. Providing an

Table 25.1
Alignment of Selected Student and Teacher Outcomes Relevant to Learning Environments and Teacher-Student Relationships

Student Outcomes From the 2019 NAGC Pre-K–Grade 12 Gifted Programming Standards	Teacher Outcomes From the NAGC-CEC (2013) Teacher Preparation Standards
1.1. Self-Understanding. Students with gifts and talents recognize their interests, strengths, and needs in cognitive, creative, social, emotional, and psychological areas. **1.2. Self-Understanding.** Students with gifts and talents demonstrate understanding of how they learn and recognize the influences of their identities, cultures, beliefs, traditions, and values on their learning and behavior. **1.3. Self -Understanding.** Students with gifts and talents demonstrate understanding of and respect for similarities and differences between themselves and their cognitive and chronological peer group and others in the general population.	1.1 Understand how language, culture, economic status, family background, and/or area of disability can influence the learning of individuals with gifts and talents. 1.2 Use understanding of development and individual differences to respond to the needs of individuals with gifts and talents.
4.1. Personal Competence. Students with gifts and talents demonstrate growth in personal competence and dispositions for exceptional academic and creative productivity. These include self-awareness, self-advocacy, self-efficacy, confidence, motivation, resilience, independence, curiosity, and risk taking. **4.2. Social Competence.** Students with gifts and talents develop social competence manifested in positive peer relationships and social interactions.	2.1 Create safe, inclusive, culturally responsive learning environments that engage individuals with gifts and talents in meaningful and rigorous learning activities and social interactions. 2.3 Adjust communication to an individual's language proficiency and cultural and linguistic differences. 2.4 Demonstrate understanding of the multiple environments that are part of a continuum of services for individuals with gifts and talents, including the advantages and disadvantages of various settings and teach students to adapt to these environments.

Table 25.1, *continued*

Student Outcomes From the 2019 NAGC Pre-K–Grade 12 Gifted Programming Standards	Teacher Outcomes From the NAGC-CEC (2013) Teacher Preparation Standards
4.4. Cultural Competence. Students with gifts and talents value their own and others' language, heritage, and circumstance. They possess skills in communicating, teaming, and collaborating with diverse individuals and across diverse groups. They use positive strategies to address social issues, including discrimination and stereotyping.	4.5 Engage individuals with gifts and talents in assessing the quality of their own learning and performance and in setting future goals and objectives.
5.3. Career Pathways. Students with gifts and talents create future career-oriented goals and identify talent development pathways to reach those goals. **6.3. Equity and Inclusion.** All students with gifts and talents are able to develop their abilities as a result of educators who are committed to removing barriers to access and creating inclusive gifted education communities.	5.5 Use instructional strategies that enhance the affective development of individuals with gifts and talents. 6.2 Understand how foundational knowledge, perspectives, and historical and current issues influence professional practice and the education and treatment of individuals with gifts and talents both in school and society. 6.3 Model respect for diversity, understanding that it is an integral part of society's institutions and impacts learning of individuals with gifts and talents in the delivery of gifted education services.

Note. The full standards may be accessed at http://www.nagc.org/sites/default/files/standards/Intro%202019%20Programming%20Standards.pdf and http://www.nagc.org/sites/default/files/standards/NAGC-%20CEC%20CAEP%20standards%20%282013%20final%29.pdf.

environment that supports this level of personal, intellectual, and creative exploration demonstrates what the programming standards describe as a respect for the talented learners' diverse abilities, strengths, and goals. Students who intuit that respect in their teacher—respect for their talents and for them as individuals—can look to the educator as a trusted guide in personal, scholarly, and potentially professional pursuits. Respecting the individual learner and then individualizing the learning experience accordingly is arguably the most effective approach the educator can adopt to nurture the personal strengths and interests of students. Consciously and deliberately seeking out individualized learning options, such

as mentorships, internships, online courses, and independent investigations, is one hallmark of teachers who know and respect their students and their specific talents and are willing to guide them and collaborate with them as they come to understand, accept, and respect themselves and their abilities (Capern & Hammond, 2014; Casey & Shore, 2000; Chandler, 2019; Hébert & Speirs Neumeister, 2000; Newsom, 2010).

Beyond that crucial stage of self-awareness and personal competence, Teacher Preparation Standards 2 and 6 speak to the role of teachers in developing social competence within their students (NAGC & CEC-TAG, 2013). The effective teacher recognizes the value of connecting students to and helping them succeed within the world beyond the classroom. Gifted students sometimes struggle with peer relationships due to a gap between their intellectual ability and social or emotional maturity, their nonconformity, their intensity, and other characteristics that lead to intra- and interpersonal conflict (Assouline & Colangelo, 2006; Kitano, 1990; Pfeiffer & Blei, 2008). Helping students with gifts and talents to develop social competence and build positive relationships, and providing opportunities to do so both in and out of school, is a key role of the teacher. In this way, teachers enable their students to sharpen and hone not only their academic or artistic talents but also the social talents of patience, tolerance, and cooperation. Although talented students may be leaders academically, ability alone is not sufficient for students to be effective leaders (Kim, 2009). Gifted education experts such as Feldhusen and Kennedy (1988), Karnes and Bean (1996), and Karnes et al. (1996) advocated for a more deliberate approach to developing leadership skills among gifted youth; the researchers argued that, in the absence of direction from parents, educators, and community leaders, the leadership potential of talented students may never be fully realized. Educators of students with gifts and talents should adopt practices that allow them to establish an environment in which students can address real social issues and acknowledge their personal ability and responsibility within that context (Bisland, 2004; Boswell et al., 2018).

The relationship between the talented learner and teachers is one that, if valued by each stakeholder, can continue to flourish and yield results beyond the classroom. In demonstrating an awareness of each student's needs, educators look beyond the time spent with the student in school and weave themselves into the very fabric of the child's life. Teachers who value their relationships with their students identify out-of-school learning opportunities that match the students' abilities and interests, collaborate with families in accessing resources to develop the children's talents, and use school and community resources that support individualized learning opportunities.

Research on Teachers and Students With Gifts and Talents

The Learning Environment standards and outcomes, as aligned in Table 25.1, represent a desirable target for a positive relationship between a teacher and a talented student. Is there systematic research on such relationships and, if so, in what ways might it inform educators? Within general education, the research on teacher-student relationships has grown into a separate area of scholarly inquiry with a body of evidence that focuses on affective concerns (Fraser & Walberg, 2005; Roorda et al., 2011). In general, the literature indicates that positive teacher-student relationships result in better achievement and social and emotional outcomes in the classroom. According to Kesner (2005), however, this research has not been applied directly to students with gifts and talents. He sought to address this gap by investigating student-teacher relationships in a sample of teachers whose students were in grades 1–5. Ninety-five of the teachers were identified as teachers of students with gifts and talents because they had a student attending a campus-based summer enrichment program; 162 teachers served as the comparison group of general classroom teachers. The comparison group teachers were asked to randomly select a student from their classroom and complete the Student Teacher Relationship Scale (STRS; Pianta, 1991). According to Pianta (1991), the scale is designed to measure a teacher's perceptions of their relationship with an individual student. The scale reports three subscales: Conflict, Closeness, and Dependency. The Conflict subscale taps a teacher's perceptions of relationships with the child that result in teacher anger. An example item is "This child and I are always struggling with each other." The Closeness subscale assesses the teacher's close relationships with the child. An example item is "This child shares personal information with me." Finally, the Dependency subscale includes items such as "This child is overly dependent on me" and "This child expresses hurt and jealousy when I spend time with other children."

Noting that talented students have been perceived by educators as presenting social and emotional difficulties, Kesner (2005) hypothesized that teachers would have less positive relationships with talented students than with the general cohort, but the results did not support the hypothesis. Teachers reported less conflict with talented students and the same level of closeness as those who completed the scale on a randomly selected child from their grade-level classroom. Kesner noted that the results for the Dependency subscale indicated that teachers who completed the scale on a student with gifts and talents reported them to be more dependent than teachers who completed the scale on a randomly selected child. Although there is generally a negative connotation to dependency, Kesner

concluded that talented children may be quite dependent on their teachers for providing challenge in the classroom.

Kesner's (2005) study is one of the few studies of student-teacher relationship research applied specifically to an identified sample of students with gifts and talents. To explore the relationships between talented students and their teachers, we must tease out insights from two other areas of research with a longer history in gifted education: students' preferences with respect to their teachers and teachers' attitudes toward and beliefs about their gifted students.

Research on Talented Students' Preferences for Teachers

In a review of the literature on teacher characteristics in gifted education, Robinson (2008) noted that the research on gifted students' preferences about teachers has generally focused on teachers' intellectual and cognitive characteristics or their personal and social ones. This pattern of investigation continues with researchers dichotomizing intellectual and personal foci as student preference choices. The early, classic study of student preferences was conducted with talented secondary students' nominations for "successful" teachers (Bishop, 1968). The 109 teachers who were nominated by one or more talented students were compared with 97 teachers who were not nominated. Following surveys, observations, aptitude assessments, and interviews, Bishop (1968) concluded that students nominated teachers who were intellectual and had cultural interests, strong subject-matter expertise, and a high need for achievement. Talented students also tended to praise these teachers for their positive attitudes; the teachers reported they preferred to teach high-ability learners. In other words, both students and teachers responded in ways that demonstrated mutual regard. In a comparison of low-achieving and high-achieving students, Buser et al. (1974) found that both groups of students valued "a teacher who listens to students" (p. 121), but a teacher who attended out-of-class activities, who was available for discussions outside of class, and who reacted favorably to criticism was more important to high achievers than to low achievers.

A series of studies of students' preferences used forced-choice formats to determine the relative importance of teachers' cognitive or personal and social characteristics to talented students. These studies began in the late 1970s and have continued sporadically with students from various cultures and across multiple grade levels. Milgram (1979) investigated a sample of 459 Israeli children in grades 4–6 attending afternoon enrichment classes. Students reported they preferred teachers with a command of their subject, a characteristic in the cognitive domain. In contrast, other forced-choice studies reported preferences for the personal and social domain over the cognitive. Specifically, Maddux et al. (1985) reported that

American students in grades 7–9 preferred teachers for their personal and social characteristics. Using a different instrument, Dorhout (1983) surveyed 279 randomly selected talented students in grades 5–12 and found they preferred personal and social attributes. Abel and Karnes (1994) partially replicated the Dorhout study with students from rural, low-income backgrounds and those from suburban, advantaged backgrounds. Both groups reported preferences for the personal and social attributes of their teachers, but the preference was stronger for talented students from rural, low-income backgrounds. Hosgorur and Gecer (2012) surveyed 296 talented students from Turkey attending Science and Art Centers and reported that students selected the personal-social domains of their teachers as most important. Finally, Vialle and Tischler (2005) surveyed 857 students with gifts and talents in Australia, Austria, and the United States, and found that all three groups strongly preferred personal over intellectual characteristics in their teachers. Although the forced-choice studies employed two different measures of student preferences, examined samples of different ages, and included students from various cultures and cultural groups, the studies converged on the importance of teachers' personal and social attributes to gifted students. Only Milgram's (1979) forced-choice study reports a relative preference for subject matter expertise. The forced-choice design may obscure important nuances. When Vialle and Tischler (2009) analyzed open-ended qualitative data from talented students, they found a third cluster, responsive instructional practices, which secondary students noted were important to their teacher preferences. In an interesting and unexpected twist to talented students' responses to their teachers, a qualitative study by Cross et al. (2018) reported that talented middle schoolers from low-income backgrounds reported supportive relationships with their teachers while students from higher income backgrounds reported teachers as barriers.

Research on Teacher Attitudes Toward and Beliefs About Talented Students

Understanding the relationship between talented students and their teachers is also informed by the research on teachers' attitudes toward and beliefs about students with gifts and talents and specialized services for them. Richardson (1996) differentiated attitudes and beliefs by suggesting that attitudes are affective, and beliefs are cognitive. More specifically, beliefs are understandings about a topic (talented students or services designed to meet their needs, for example). Attitudes are feelings and emotions directed toward a topic (positive affect toward talented students, but negative affect toward providing educational services for them). Teachers' attitudes toward talented and high-achieving students have been the subject of investigation for more than 50 years. Yet, according to a study by

McCoach and Siegle (2007), the picture of general educators' attitudes continues to be unclear. Several studies reported slightly positive attitudes toward students with gifts and talents and generally attribute the attitude to the effects of training. For example, Buttery (1978), Megay-Nespoli (2001), and Morris (1987) investigated preservice teachers and reported modestly positive attitudes following training or exposure. Rubenzer and Twaite (1978) surveyed 1,200 inservice teachers and reported that positive attitudes were related to the degree of exposure to gifted education reported by the respondents. In contrast, McCoach and Siegle (2007) did not find a relationship between training and teacher attitude in a survey of 262 teachers. Although teachers with training were more likely to self-report as gifted themselves, their increased self-perceptions did not translate to more positive attitudes toward students with gifts and talents.

Additional evidence of teachers' ambivalence toward gifted and talented students comes from two partial replication studies. Cramond and Martin (1987) investigated preservice and inservice teachers' attitudes toward talented students using the methods developed by Tannenbaum (1962) to investigate adolescents' attitudes toward academic brilliance. Cramond and Martin (1987) found teachers to be more positive about average, nonstudious, and athletic students than they were about brilliant, studious, and nonathletic students. Unfortunately, this pattern appears robust across time and culture. A replication with Korean teachers found very similar results (Lee et al., 2004). Attitudes were most positive toward athletic and nonstudious students. Teachers held the least positive attitudes toward nonathletic and studious girls.

We concur with McCoach and Siegle's (2007) assessment that the picture of general education teachers' attitudes toward talented students and services for them remains unclear. Bégin and Gagné (1994) set out a research agenda for investigating teacher attitudes toward gifted students and gifted programs, but the number of variables they identified, the limited number of studies that investigated the same variables, and the weak research designs of the studies all contributed to the lack of consistency in the research. Perhaps disentangling teacher attitudes toward a gifted student from teacher attitudes toward meeting the needs of that student through services might clarify the patterns reported in the literature. We suggest it is possible to feel positively toward talented students but not wish to set the priorities of time or resources to meet their needs with services.

With respect to teacher beliefs about talented students, studies generally investigate stereotypical thinking, reasoning about giftedness, or conceptualizations of giftedness. For example, Carman (2011) asked preservice and inservice teachers to draw an imaginary gifted person. Baudson and Preckel (2013) used vignettes to survey whether teachers subscribed to stereotypical thinking about gifted students as examples of the disharmony hypothesis, in which cognitive

talents are paired with social and emotional inferiority, or the harmony hypothesis, in which talented students display advanced development across cognitive and social and emotional domains. Most teachers subscribed to the disharmony hypothesis, indicating they believed that a talented student's advanced cognition was balanced by diminished personal and social competence. Miller (2009) investigated reasoning about giftedness in a sample of 60 inservice teachers by having them construct a graphic organizer or concept map of giftedness. She reported that teacher reasoning indicated a tendency to ascribe characteristics common to more traditional conceptualizations of giftedness like "book smartness" and that teachers did not often recognize "street smartness" as indicators of talent. Moon and Brighton (2008) surveyed 434 teachers in a mixed-methods study and found that teachers generally held traditional beliefs about students with gifts and talents. Across the Carman (2011), Miller (2009), and Moon and Brighton (2008) studies, a pattern of teacher beliefs emerged that indicated children from underrepresented groups were less likely to be thought of as gifted.

In summary, teachers hold a variety of attitudes toward and beliefs about giftedness and students with gifts and talents. For counselors collaborating with teachers, an awareness of the range of attitudes, actions, and beliefs held by their colleagues will encourage a more productive collaboration on behalf of talented students (Wood, 2012).

Issues for School Counselors

Although the research on the relationships between gifted students and their teachers supplies some guidance for counselors, the world of practice is a source of information as well. School counselors will encounter teachers who want to collaborate with them on behalf of students with gifts and talents and teachers who are hostile about them. There are educators with very specific or limited ideas as to how such a student "looks" or behaves (Szymanski & Shaff, 2013). Each context presents the counselor with the need for information about standards, research, and evidence-based practices.

Collaborating Effectively With Teachers

What can counselors expect in terms of teachers' relationships with or concerns about them? In other words, in what contexts might counselors expect to be approached by a teacher for support? We hypothesize four specific problems as likely areas for teachers to have questions, concerns, or needs with which they feel counselors can assist them. These issues are underachievement, perfection-

ism, social competence (including peer relationships and social isolation), and postsecondary planning. Most assuredly, other quite serious problems that require counselor intervention exist, but these four issues are common for teachers.

Underachievement. One of the most likely issues for teachers to raise with their school counselor is the underachievement of a talented student in their classroom. The underachieving student is a consistent concern among teachers because it puzzles them that a child who they believe can do work, won't or cannot do work. The teacher is likely to be frustrated by a bright child or adolescent underachiever and by the recalcitrance of underachievement. This behavior is not easily modified. One of the ways that counselors can help is to explore with the teacher the reasons for underachievement. Some children underachieve because the curriculum and instruction are not a good fit for them. Some underachieve because they are vulnerable to stereotype threat. Some underachieve because they have a skill gap due to the lack of opportunity to learn. Some underachieve because they have an undiagnosed learning disability. A course of action that the teacher and counselor might undertake together differs based on the primary reason for underachievement. Chapter 31 by Siegle, McCoach, and Rubenstein (this volume) deals with the underachievement of students with gifts and talents in depth and provides information to counselors about the definition, nature, and variability of talented students who are also underachievers.

Underrepresentation. There are inequities in the identification of and services to economically disadvantaged and culturally/linguistically diverse gifted students. Ryser (2018) identified three primary barriers: low teacher expectations of students from ethnic, racial, and economic minorities; definitions of giftedness that focus on demonstrated high achievement; and tests that are unfair to economically disadvantaged and culturally/linguistically diverse gifted students. Training and professional development opportunities that include strategies for identifying and serving students across racial and cultural groups are critical. For example, using assessments that include multiple measures along with procedures for universal screening as part of the identification process are areas in which teachers and counselors can exert influence and begin to affect change.

Perfectionism. Perfectionism has long been and remains widely considered a characteristic of giftedness (Rice & Ray, 2018). Teachers may attribute repeated failure to turn in assignments, anxiety, and other manifestations of stress to perfectionism in high-ability students. Any of these behaviors or conditions can trigger a teacher's desire to talk with the counselor personally or to refer the student directly to the counselor for assistance. Teachers' concerns about the perfectionism of a student with gifts and talents are an opportunity for collaboration with the counselor. Counselors who understand the difference between perfectionism and the high, but healthy, personal standards often held by students with gifts and

talents are in a position to support both the student and the teacher. See Chapter 38 by Greenspon (this volume) for an in-depth discussion of perfectionism.

Peer Relationships. Teachers attuned to the needs of their talented students may be likely to voice concerns about their peer relationships. In some cases, teachers may hold stereotypes about students with gifts and talents and assume diminished social competence in a talented child or adolescent—an example of the belief in the disharmony hypothesis. In other cases, teachers can be very keen observers of behaviors that put peers off and genuinely contribute to social isolation. Although many teachers will implement strategies in the classroom to address issues of social competence, they may also seek the counselor's assistance outside the classroom. An effective collaboration may be lunchtime conversation groups managed by the counselor, coupled with matching a talented student and a like-minded peer on particular assignments or projects in the classroom. Technology and its ability to bridge geographic and even socioeconomic or cultural divides can play a key role in facilitating interaction between students who share common interests and even challenges, providing opportunities for both intellectual collaboration and more general socialization. In fact, online learning is uniquely positioned to allow for flexible grouping and positive socialization among students for whom social challenges may be the result of inadequate or inappropriate student grouping rather than actual social deficiencies (Potts, 2019). Structured socialization is a reasonable response to concerns about peer relationships and can be done by both the teacher and counselor working together to utilize an increasingly varied array of both in-person and online tools and scenarios. Table 25.2 provides examples of peer-to-peer and teacher-to-student online relationship building. Chapter 24 by J. R. Cross (this volume) offers further information on the peer relationships of gifted children and adolescents.

Related to issues of social competence, teachers' concerns about the immaturity of a talented student may prompt a visit to the counselor, although teachers of young children are more likely to address this issue first with parents. Teachers who have little or no training in gifted education may be unaware of the issue of uneven development. Particularly in young children with gifts and talents, the discrepancy between a child's advanced cognition and age-appropriate, emotional development may be quite startling (Pfeiffer & Blei, 2008). The child may appear immature when in fact they are displaying emotional development typical for their age. The contrast may be misleading to educators. Counselors can be an effective sounding board for teachers who have concerns about the uneven social and emotional development of precocious children. See Chapter 17 by Silverman (this volume) for a discussion of asynchronous development.

Postsecondary Planning. Issues related to underachievement, perfectionism, and social competence can occur at any point across a student's educational

Table 25.2
Examples of Online Collaboration and Community Building Resources

Online Tool/Resource Name and Description	Link
Nepris Connects educators with a vast network of industry professionals to actively engage students in their learning and prepare them for their future. Teachers help students (individually or in groups) identify a topic or project of interest, and Nepris invites appropriate industry professionals to show how the topic is applied in their work, to help guide students with their projects, and/or to evaluate final student deliverables. This provides an authentic and collaborative opportunity to see how a student's interest might be applied across a variety of career fields while facilitating teamwork.	https://www.nepris.com/home/v4
Makers Empire Students work collaboratively with a community of other "makers" to devise solutions to real-life problems. Students share creations and elicit feedback from teachers and classmates.	https://www.makersempire.com/for-students
PenPal Schools An online platform that facilitates authentic, cross-cultural collaboration. The program incorporates digital citizenship along with social and emotional learning.	https://www.penpalschools.com/index.html
Piazza An advanced Q&A tool that compels collaboration and higher order thinking. Piazza serves as an online gathering place in which students ask questions in a forum-type setting while instructors moderate discussions and endorse correct answers.	https://piazza.com

trajectory. As students enter high school, however, the need for postsecondary planning may be acute. High school counselors are an invaluable resource for talented students, their families, and their teachers. Counselors can expect activist teachers to engage with them on behalf of talented students in the college and career planning process. Teachers observe student interests in the classroom and work to develop these interests through strategies such as mentorships or independent investigations, but the intersection of student interest with postsecondary planning and application is usual territory for the school counselor, who has ready access to college planning tools and information about career pathways that might not historically have been considered especially appropriate for students with gifts and talents. The collaboration between teacher and counselor is espe-

cially important for talented students who are first-generation college applicants or who are from low-income homes. Collaboration is also important as teachers and counselors help students consider alternatives to the traditional 4-year college path and provide an informed perspective to families about a variety of options, including the potential value of career and technical education (Smith & Wood, 2020). Career and technical education should not be considered the domain of those interested in or capable of pursuing only those fields requiring little intellectual rigor while relying largely on physical capacity and dexterity. Technical fields today are dependent on the types of creative problem solving long associated with careers like engineering and on emerging technologies that will shape students' environments and determine the highly sought-after careers of the future. Postsecondary planning falls into two broad categories where teachers and school counselors can collaborate: academic planning and career exploration. In-depth discussions on these topics appear in Chapter 29 by Olszewski-Kubilius and Corwith and Chapter 32 by Kim in this volume.

Advocacy When the Student-Teacher Relationship Is Not Positive

Although collaborating with a sympathetic teacher to address the needs of students with gifts and talents is the preferred option, there are instances when collaboration is not possible. Counselors need to recognize that not all teachers hold positive attitudes toward talented students in the classroom. As reviewed earlier in this chapter, the research is mixed. McCoach and Siegle (2007) noted that there was extreme variation in teachers' reported attitudes; thus, some individual teachers will not be sympathetic. In fact, Geake and Gross (2008) investigated teachers' affect through the use of stereotypical statements about students with gifts and talents and concluded that negative affect about academically gifted students was deeply rooted in concerns that such individuals threaten group solidarity. Counselors will encounter some teachers who are quite hostile to bright students. In such cases, the counselor may seek to diffuse the situation by talking with the teacher or by seeking another placement for the child or adolescent with a more sympathetic teacher. In such cases, the counselor is acting as an advocate for the talented student in their relationships with teachers.

Conclusion

In summary, the relationship of the teacher and the student with gifts and talents is a critical piece of what school counselors need to know in order to understand and support the talented students in their charge. Standards that address both teacher and student outcomes, research that investigates the relationships between teachers and their talented students, evidence-based practices, and an awareness of common areas of concern contribute to practical actions school counselors can take.

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CHAPTER 26

The Counseling Relationship

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Regardless of the extent that highly able children and teens fit common "giftedness" stereotypes, their psychological complexity plays a role in whether a collaborative counseling relationship develops, what kind of therapeutic relationship develops, and whether there are positive outcomes. That complexity, reflecting characteristics associated with giftedness in the clinical and empirical literature, may contribute to both challenges and dramatic personal growth. However, many elements can affect the relationship between a counselor and a gifted child or teen, including what the counselor brings to the relationship.

Seminal theorists have varied in how they view the function and importance of the helping relationship: necessary and sufficient (Rogers, 1957), central (Gelso & Carter, 1994), or simply a practical means to an end (Arnkoff, 1995). Regardless, according to Yermish's (2010) study of the therapeutic alliance, counselors have unique power when working with gifted youth, particularly when the latter have otherwise felt socially and emotionally isolated and not understood because of their differentness. If the relationship does not develop positively, it is likely that personal growth will not occur and possible that harm will be done. When the therapeutic relationship is broken, it probably cannot be reconstructed.

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Gifted Students' Attitudes About Asking for Help

School counselors should be aware that gifted students may have complex feelings about asking for help and about the kind of intimacy inherent in the counseling process—and that the counselors need to behave accordingly. School counselors have the advantage of being able to have informal contact with students outside of the counselor's office, including in the lunchroom and halls, during whole-classroom and small-group guidance for elementary-level students, and during large- and small-group activities related to career, social, and emotional development for secondary-level students. During these contacts and when meeting about a class or schedule change or letters of recommendation for college entrance or scholarships, students may carefully appraise demeanor and mode and feel encouraged to mention a more serious concern. Wise counselors avoid assumptions about gifted students based on self-presentation and achievement level and instead, to establish connection, ask genuinely about well-being regardless of the stated purpose of the visit.

In my own school-based work, honor students, student body presidents, National Merit Scholars, stellar athletes, and extremely talented artists often presented themselves as socially and emotionally secure, or with only minor presenting concerns. Eventually some revealed disordered eating, depression, thoughts of suicide, distress over gender or sexual concerns, extended and complicated grief after personal or family losses, or trauma (e.g., bullying, sexual and other physical abuse, acquaintance rape, horrific accident, parental neglect). It is important that school counselors recognize that issues appearing to be only minor concerns should also be explored, such as high stress and anxiety related to advanced courses and extreme involvement in talent areas, service activities, and employment (Peterson et al., 2009).

Considerable research evidence has indicated that highly able adolescents are adept at hiding distress and may be reluctant to ask for help (e.g., Peterson, 2001, 2002, 2009). In written feedback after a year in small-group discussion with other gifted students, some high-achieving, high-stress students noted their perception that school counselors are busy with other students and not available for, in essence, "kids like us." However, even when gifted students ask for help, they may not find compassionate support from adults (Peterson & Ray, 2006b).

Exploring best practices for working with gifted youth, Wood (2010) studied 153 adolescents identified as gifted in visual and performing arts and humanities and found that high percentages believed their counselor behaved according to national standards and did not imply that giftedness was a negative. However,

approximately half felt misunderstood by their counselor or felt that their concerns were dismissed. Two paradoxical aspects of high achievement that might be misunderstood are the stress of heavy involvement in activities and the benefits of "going beyond"—new perspectives, vision, direction, confidence, connections, spiritual growth, and additional opportunities. The stress and the benefits seemed to be balanced in a study of positive life events (Peterson et al., 2012).

Other studies have also illuminated concerns about help-seeking. In Jackson and Peterson's (2003) qualitative study of a clinical population with extreme ability, some clients were reluctant to tell their parents about serious concerns. They were concerned about the effect of the toxicity of their distress. In three of the four cases followed in a longitudinal study of high-risk gifted graduates (Peterson, 2001), all of them with significant distress, no one in the family was aware of their intense internal conflict because they did not talk about it. In a mixed-methods national study of bullying involving 432 gifted eighth graders (Peterson & Ray, 2006a, 2006b), 17% of those who had been bullied wrote "No one" or "Myself" in response to the open-ended question, "Who helped you?" Those who had told a teacher said they were not taken seriously. During interviews with 55 of the participants, almost all of whom had been bullied, only three mentioned talking to a school counselor about the bullying. One of those had been helped by peer mediation and another by a lunch-hour small group. One interviewee said, "I should've told somebody, but I felt I could do it myself" (p. 259), suggesting that gifted students may think they should be able to figure out effective strategies to stop the harassment themselves. Several targets of bullying indicated that they had spent a great amount of time alone, trying to make sense of the bullying, devising "comebacks" that were never spoken, or having violent thoughts.

In a qualitative study of 18 gifted LGBTQ young adults looking retrospectively at their development during the school years (Peterson & Rischar, 2000), 83% had experienced depression and 72% had experienced suicidal ideation, but only 33% and 31% of those, respectively, had discussed their despair with parents, and none had with teachers. It is likely that the counseling experiences of 78% of participants (with 79% of those deeming it helpful) contributed to their being willing to participate in the study. Therefore, it should not be deduced that such a large percentage of gifted youth would typically seek out counselors. Similarly, the findings about parents or teachers should not be generalized. The latter findings do, however, reflect the hesitation to seek help.

Perhaps also contributing to that reluctance, gifted children and teens who are high achievers may be protective of their image as intelligent, competent high performers (Peterson, 2009). Others may protect an image of rebellious underachievement. Each may believe that revealing limitations or concerns carries more risk than benefit. In addition, if they perceive that help will not be available, based

on previous lack of protection and support from significant adults (cf. Miller, 2002), they may not seek out a school counselor. They also may not trust that counselors can understand their complexity (Yermish, 2010).

In contrast, in a longitudinal, qualitative study of a gifted, talented, high-achieving survivor of multiple traumas (Peterson, 2012), the participant begged her resistant parents for counseling and, despite a few negative experiences with high school and university counselors later, continued during young adulthood to seek counseling when feeling overwhelmed by confusing, extreme emotions related to posttraumatic stress.

The Initial Contact and Beyond

The quality of the first meeting with a gifted student in a counselor's office is crucial for establishing a therapeutic relationship, even if that contact is brief. It is important that a counselor recognize that the student likely comes with a sense of vulnerability and, if contact was self-initiated, that making the decision to see a counselor for social or emotional concerns was probably difficult. For some, the contact may feel like a last chance for validation, empathic understanding, being heard, and well-being. When a counselor is able to convey genuine interest in the student's world at the initial meeting, the chances for collaboration and growth are enhanced. When a positive relationship is established, when complexity is embraced, and when gifted students feel understood, cognitive strengths can contribute to a productive counseling experience. When a solid relationship is established, a gifted individual can gain important self-awareness through being appreciated by, and having positive attributes acknowledged by, someone who is valued and respected (Yermish, 2010)—in this case, the school counselor.

What occurs during the initial contact sets the tone for later work. That tone may determine who controls the relationship, whether student manipulation plays a role, whether trust and safety are generated, whether a reversal of counselor and client roles develops, whether the counselee presents a false self, whether perfectionism (i.e., needing to excel in counseling to feel accepted by the counselor) plays a role, how intellect and affect are balanced, and whether the professional is credible and respected. All of these areas reflect findings in Yermish's (2010) study of the therapeutic alliance when the client has exceptional capability.

Existential depression is a concept that usually resonates with gifted students. Using this concept, when appropriate, to frame vague sadness may not only help students make sense of themselves, a crucial function of counseling in general, but also help establish an effective therapeutic relationship. Existential depression, according to Webb (2014), reflects disillusionment, when a child or teen reckons

with how the world *is* versus how it *ought* to be. Using the concept to validate feelings can communicate empathic understanding.

Competence Regarding the "Giftedness Culture"

A school counselor's "cultural competence" related to giftedness (cf. Yermish, 2010) is important regardless of the purpose of a contact and where the student is on a broad continuum of achievement and ability. Knowledge and awareness of the giftedness subculture is especially important when developing a relationship with students with extremely high intellectual ability.

Being aware that many common perspectives about high ability are not based on reality is also important. Among many myths about giftedness, citing scholars who have refuted these myths, are that giftedness is always reflected in high test scores (Worrell, 2009), that high ability protects gifted individuals from problems and challenges that others may have and that these students will have success later regardless of school experiences (Moon, 2009), and that achievement for gifted students is effortless (Gladwell, 2008). Countering the broad myth that perfectionism always reflects conditional self-acceptance and a need for acceptance from others, Greenspon (2016) argued that fear of failure and anxiety about making mistakes drives perfectionism, a self-esteem issue; that perfectionism is not an essential component of giftedness; and that gifted individuals are not more perfectionistic, collectively, than the general population.

Finally, pertinent here, Krafchek and Kronberg (2018) challenged the common assumption that disordered eating in high-achieving females is related to perfectionism and weight. Instead, their findings indicated that eating problems are related to the cumulative effect of stressors that affect feelings of self-worth—that is, multiple stressful events over even a decade. Over time, the role of academic achievement moved from protector, to coping strategy, to stressor, and finally to risk factor, possibly leaving eating the one controllable element. Feelings of self-worth could no longer depend on, in turn, family, teachers, and academic success. Counselors believing any of the myths discussed here might negatively affect the counseling relationship, but discussing them may be helpful for parents, teachers, and administrators.

Given inconsistent findings across several studies, and because comparative studies are rare, it is also important not to assume that gifted individuals have relatively more mental health concerns (Robinson & Reis, 2016) and to be prepared for related questions from students who have been referred to a counselor. Research samples are often limited to only high achievers, a clinical population, a residential school, or a summer program, for example, and twice-exceptional students (Foley-Nicpon, 2016), academic underachievers, and students represent-

ing a wide range of socioeconomic levels may therefore not be included. In addition, varying assessment instruments make meta-analysis of multiple studies difficult, precluding confident statements about the mental health of gifted students (Martin et al., 2010). However, a rare, recent comparative study (Karpinski et al. 2018) of 3,715 adult American Mensa members (with measured intelligence at or above the 98th percentile, ages 18 to 91), with data available from national health surveys for comparison, is pertinent here, even though the researchers did not claim that findings should be generalized to bright children and teens. One implication was that high-IQ adults may be at higher risk for psychological disorders because of the psychic overexcitabilities (Piechowski, 2013) associated with high intelligence, which are routinely included in discussions about characteristics associated with giftedness.

Biases

In regard to being able to build a positive counseling relationship, school counselors should consider how they view students with exceptional ability, whether they are comfortable with them, whether they can be fully present with them, how they feel and what they believe about underachievement and high academic achievement, how they feel about highly invested parents of gifted children, how they feel about their district's identification processes for determining which students have access to special services, and where academic achievement should be located in a hierarchy of factors related to life satisfaction. Not being able to be fully present is likely to be an issue when school counselors are not aware of their biases about gifted students and not able to meet them "where they are," without positive or negative judgment, and with a focus on the present, not on where they *should* be (Peterson, 2009).

In my experience as an educator of counselors, I observed (or heard on audio recordings of practice sessions) interns move into a competitive mode, especially with humor but also with knowledge, in sessions with even young gifted children—not recognizing the latter's vulnerability, not seeing them holistically, not validating emotional experiences, and ignoring their emotional and cognitive complexity and feelings about others' expectations. Counselors may feel insecure and inferior in the presence of remarkably bright children or teens. Any of these responses may preclude effective listening and counseling. Similarly, when counselors "glow" in awe when responding to gifted students, they may not recognize vulnerabilities, and the students may then not be inclined to reveal concerns. Awe might actually alter the usual power differential in the counseling relationship, and it may also perpetuate a gifted child's need to impress others.

In a study of school counselors' experiences with high-ability children, including many from low-income families, at a summer enrichment program (Peterson, 2013), the counselors became aware of their own biases. They were surprised at how different the children were from those they worked with otherwise. They remarked about the children's high stress levels, heightened sensitivity, anxiety, constant awareness of adults' high expectations for them, perception of all activities as high-stakes "tests," and alarm when other children seemed to have more knowledge than they themselves did. Daily, when the time for small-group discussion arrived, one child asked, "Can we do worries again?" (p. 200). The school counselors said they became newly aware of the complexity of the concept of giftedness. They also said they realized the importance of giving attention to the social and emotional development of bright children.

The trauma survivor mentioned earlier (Peterson, 2014) experienced one psychologist who apparently followed an impulse to humble her. She had dropped out of high school because of the stormy impact of breached confidentiality, was experiencing clinical depression, and was arranging to enter college. The psychologist reminded her, with a condescending, negative tone, "that at college I'd find people who were smarter than me" (p. 304). Such devaluing may be a defense against a threat to a sense of self as a skilled, knowledgeable professional (Brightman, 1985) and is especially likely in the presence of extreme ability. Self-awareness in school counselors and awareness of characteristics associated with giftedness, such as heightened sensitivity to environmental stimuli and intensity (Mendaglio, 2007), may curb those defenses.

An additional source of bias is related to gifted individuals' cultural identity (Levy & Plucker, 2003). Pertinent to counseling, culture can not only affect the counseling relationship (Atkinson & Hackett, 2004), but also influence classroom behavior, teacher-student relationships, and assumptions about giftedness and achievement. When Peterson and Margolin (1997) studied teacher gatekeepers for special services through interviews, the teachers' justifications for nominating children in their classrooms for a hypothetical gifted program reflected the dominant-culture valuing of individual, competitive, conspicuous achievement (Spindler & Spindler, 1990). Behavior, verbal assertiveness, family status, work ethic, and social skills were major themes in the teachers' language. These ad hoc criteria might interfere with identifying children from cultures that do not value verbal assertiveness and "standing out," as well as students with low English proficiency, behavior problems, low socioeconomic status, and poor social skills. A parallel study of the language of representatives of five nonmainstream cultures (Peterson, 1999a) revealed values that differed from those reflected in the teachers' language: service to others, expressive arts, handiwork, adaptability, and nonbookish wisdom. The differing cultural values raise questions about potential

counseling issues, such as not having capability validated by self or others because of being deemed ineligible for narrowly conceived gifted education programming. When school counselors keep these findings in mind, they may be able to advocate for bright, talented students who fit poorly in a one-size-fits-all program.

Recognizing Range, Complexity

In IQ terms, from the lower end of the giftedness range (130, plus or minus error) to the top of measured intellectual ability (210, according to new extended norms for the Wechsler Intelligence Scale for Children–Fifth Edition [WISC-V], frequently used for individual IQ testing; Raiford et al., 2019), the range of what is potentially considered "gifted" is comparable to almost the entire bell curve of ability. When counselors recognize that there are likely to be vast differences in social, emotional, and cognitive development within the population labeled *gifted* (and also students within the error range, but not identified as eligible for programs), they are less likely to think in common stereotypes about counseling concerns and approaches. It is also helpful to remember that concepts like intelligence and giftedness are socially constructed, not universally agreed upon, with identification policies potentially reflecting the type of program offered, the population being assessed, and cultural factors, with effects on a student's identity, rather than an "it" that is identified (see Foley-Nicpon, 2016).

Acknowledging differing conceptualizations of "intelligence" (e.g., Gardner, 2006; Peterson, 1999a) and levels of "giftedness" (Gagné, 2018) also allows counselors to consider how idiosyncratic this high-ability population is. Imagining a separate bell curve for each conceptualization of intelligence, and for each culture's valued areas, is also good preparation for counseling bright kids. Two helpful mantras when working with them are "Expect complexity" and "Embrace complexity." The 15-year prospective study of a gifted survivor of family violence and sexual abuse became an examination of complex social and emotional development (Peterson, 2014). She met several criteria for post-traumatic stress disorder (PTSD), and her actions and responses reflected many characteristics associated with giftedness, including sensual, emotional, and intellectual overexcitability (OE; Piechowski, 2013). She said her sensual OE propelled her forward until her intellectual OE could help her make sense of her life.

Acknowledging the Asset-Burden Paradox of Giftedness

A growing literature asserts that giftedness can be both positive and negative (Kramer, 1983; Peterson, 2012; Plucker & Levy, 2001; Reynolds & Piirto, 2005), yet the asset side of giftedness has usually received more attention than the burden side in the field (Yoo & Moon, 2006). School counselors need to be aware of the asset-burden paradox of giftedness. In a two-column (giftedness as asset and as burden) grid of significant developmental experiences in the life of the gifted survivor of trauma mentioned earlier (Peterson, 2012), the columns were essentially equal. Intelligence helped her locate resources, be proactive, not assume responsibility for fixing family, and make sense of her experiences, but her abilities also made her a readily available scapegoat within and outside of her family and contributed to an extreme sense of urgency to use her strengths to actively advocate for individuals who had been harmed. Her serious concerns were often dismissed by people preoccupied with her positive self-presentation and her high intelligence.

The participants in Yermish's (2010) study perceived both risk and resilience in cognitive strengths. Intensity and extreme empathy could overwhelm self or others and lead to intense reactions to injustice. Perceiving contradictions and ironies generated conflict with others, and intense, atypical interests, values, or behaviors also affected relationships. High achievement goals led to negative self-judgment and a felt obligation to serve others. Complex family life was often overwhelming. The notion of a two-sided impact of high ability usually resonates with bright students. Exploring the paradox can help establish trust in the therapeutic relationship.

Basic Counseling Tenets Still Apply

In order to establish a working relationship with anyone who seeks or is referred for counseling, school counselors need to remember to employ basic, long-honored counseling tenets, including unconditional positive regard, accurate empathy, and genuineness (Rogers, 1961), especially when working with gifted youth. No matter how impressive the intellectual ability, sense of humor, talent development, performance level, or passion for an area of interest, and no matter how much of a match or mismatch exists between ability and performance levels, a counselor's ability to enter the student's world with respect, nonjudgment, validation, compassion, and appreciation for willingness to engage vulner-

ably is essential. The counselor's responsibility is to provide a safe environment for self-exploration, with the therapeutic goal being unconditional acceptance of self. Prematurely doubting clients' experiences and achievements, as presented, can preclude a therapeutic relationship (Yermish, 2010) and safe exploration. In a mixed-methods study of negative life events (Peterson et al., 2009), when gifted graduates were asked what teachers should understand about them, one said that criticism should be gentle. Confrontation in the counseling process should probably be gentle as well. Nudges are likely to be heard and felt by bright, sensitive, intense students as strong directives.

The school counselor's ability to collaborate is also crucial to developing a counseling relationship, including being open to establishing a more egalitarian relationship than usual (cf. Yermish, 2010). Proximity within a school allows collaboration between counselor and teachers about support strategies (e.g., encouraging a teacher to engage an emotionally struggling student in brief, casual conversation as students enter the classroom; the counselor stopping in before or after school for a teacher's quick report of schoolwork, demeanor, engagement). Openness to collaboration with parents/guardians may help counselors understand family context (e.g., unwanted or uncomfortable roles for the bright child or teen, family stressors), its impact on schoolwork (e.g., uneven test scores, homework gaps) and well-being, and how to offer support (Peterson, 2009).

In general, but especially for relationship building, processing experiences is important in order to help gifted students develop expressive language and be in touch with how they are experiencing counseling. Whether in one-on-one or small- or large-group formats, pausing after an extended interaction or after a session and asking open-ended questions about what has occurred encourages self-reflection and suggests that students' perspectives matter. Reflecting on social and emotional aspects of counseling challenges even loquacious students to "put words on" feelings and observations. Possibilities for open-ended questioning during or after small-group work, including practice sessions before a competitive extracurricular activity, include these:

- What was it like today to talk about this complicated topic?
- How did that feel when she said that to him?
- What were you feeling when he was talking about that?
- How did it feel to give her that compliment?
- How did it feel to get that compliment?
- Today some impressive things happened in your group. How did you accomplish that?
- What did you gain from this discussion?
- What might you remember from this discussion a few days from now?
- How did you feel during the competitive activity today?

Similar questions during or after individual meetings might include the following, demonstrating interest in the experiences and well-being of the gifted student, and simultaneously continuing to develop the therapeutic relationship:

- I noticed you had a hard time responding when I asked you that. What were you thinking? What were you feeling?
- What was that like today, talking about your trouble with your brother?
- After you finished explaining that, what were you feeling?
- What is it like to come here and talk like this?

It is easy to assume that gifted students recognize and appreciate their strengths and have a strong sense of self. However, statements, in contrast to questions, are as important during interaction with this population as with any other. Statements can reflect careful listening and genuine interest in the student and can help establish trust. Statements can affirm ability, validate feelings, and purposefully call attention to personal strengths in a noncompetitive environment:

- I've noticed you aren't glib. You think before you speak.
- That's a good example of the problem-solving ability I've been seeing in you.
- I can see that you care about your family. Your grandpa has a special role in your life.
- It makes sense that you were so upset.
- I'm glad you told me that you sometimes feel crazy. You're not crazy. You're a sensitive kid who is bothered by what you see and hear in school and at home.
- I'm so glad you have the ability to express yourself and say what you're feeling.

With any student or parent, but especially with gifted children and teens, acting "clueless" can generate expressive language. Gifted students may not be accustomed to interacting with nonexpert adults. Examples of "one-down" comments follow:

- I can't imagine what that's like. Help me understand—being 12 and having all that fighting and loud arguing going on.
- I don't know your world. What do kids like you do when they have free time?
- Help me understand what this has been like, at your age, to have three deaths so close together in people you care about.

When school counselors remember their training and remember that their role is to address the needs of all students, not just those with obvious concerns,

positive therapeutic relationships with gifted students can occur. In a safe, non-evaluative environment, gifted children and teens can learn about themselves in the presence of an adult who is not preoccupied with their performance or non-performance and is interested in them as unique human beings.

Fundamentally, it is important that counselors take seriously whatever is presented as a concern, including by parents, even when it does not appear at first glance to be urgent. In a study of counseling concerns noted by parents of gifted children on an intake protocol at a university-based counseling center, Yoo and Moon (2006) found that school concerns were common: boredom, educational planning (e.g., grade acceleration), and talent development. Adolescents, especially, were perceived to need assistance in career planning. Across all ages, most parents wanted assessment and recommendations to help them advocate for services. The counseling process with the children of these parents does not need to be limited to these areas, of course, but those concerns do involve attention to the whole child.

Potential Harm Within the Relationship

Giftedness, in whatever form, uniquely influences the social and emotional development of gifted individuals (Mueller, 2009). In Yermish's (2010) study of the therapeutic alliance, the highly gifted participants underscored that giftedness affects all aspects of life—academic performance, personality, behavior, and relationships. It is not a "side issue" unrelated to therapy. Adults who had experienced therapy during childhood, adolescence, or adulthood indicated that a helping professional's role potentially went beyond helping with problem solving. The most capable and gifted professionals, in long-term work, served as both model and "fellow traveler."

Extremely gifted individuals may presume correctly that counselors who have extreme ability themselves will be able to offer compassionate empathy, but the intellectual match does not guarantee it. Skilled bright counselors with less-than-extreme ability, but with genuine interest in how extreme giftedness is experienced, can help gifted kids make sense of emotions and behaviors. In contrast, when therapists of participants in the Yermish (2010) study invalidated experiences, did not value cognitive strengths, or implied that not conforming to "normal" meant "defective," study participants viewed these behaviors and attitudes as harmful to the relationship and a reminder of judgment and trauma experienced elsewhere.

Helping professionals can offer empathic appreciation for gifted individuals. Bright students with a history of interpersonal difficulties because of their place

on a bell curve of cognitive ability may interpret the absence of an empathic response as rejection. Williams and Zadro (2005) noted that ostracism, social exclusion, and rejection can lead targets "to experience ongoing psychological, somatic, and interpersonal distress that may reverberate throughout all segments of their life" (p. 33). Participants in the Yermish (2010) study who perceived lack of empathy felt rejection, especially when the professional was viewed as highly intelligent. They found the experience painful, with the professional's behaviors exacerbating problems for some.

Paying Attention to Developmental Tasks

School counselors need to pay attention to differing developmental levels, even within one gifted student, when building a counseling relationship. When contemplating therapeutic approaches, counselors should intentionally consider students' probable *asynchronous* development, with cognitive development outpacing social and emotional development or developmental levels being generally uneven, or *dyssynchronous* development, being and feeling out of sync with age peers (Silverman, 2013). Merely average social or emotional development may be deemed "immature" by school personnel, given gifted students' exceptional intellectual strengths. School counselors can utilize information about asynchronicity and dyssynchronicity to help gifted children and adolescents make sense of themselves (Silverman, 2013) and reconcile cognitive and affective responses to negative, unsettling experiences (e.g., witnessing or experiencing bullying or violence at home or at school).

With all age levels, when nurturing the counseling relationship, counselors can keep a number of developmental concerns in mind that may not be presented directly. Gifted youth who are accustomed to using cognitive strengths to control many aspects of their lives may be anxious when anticipating developmental transitions (e.g., puberty). Entering high school may be particularly unsettling, with effects on academic work (Desmet et al., 2020). Anxious, high-control students may be especially uncomfortable with change (Peterson, 2018), such as family relocation, entering kindergarten, having a new teacher each year, changing from one main teacher in elementary school to multiple teachers in middle school, or leaving home for college. Change means moving into unknown territory without a map. When gifted children have low tolerance for ambiguity, feelings of uncertainty may generate anxiety. Peer relationship changes, troubling thoughts about sexuality and sexual orientation, raised awareness of gender identity, the threat of an insidious pandemic, a sense of differentness in a new context, changes in family constellation or financial stability, and even parental angst about children's transi-

tions may make growing up particularly challenging. Psychoeducational information about development, when it does not dominate the counseling sessions, can help gifted children and teens make sense of feelings and behaviors and trust the therapeutic relationship.

Both high and low academic performers may struggle with developmental tasks. Both may be developmentally *stuck*. Using "stuckness" language with stressed students might help a school or other counselor develop a collaborative counseling relationship. Developmental tasks for gifted youth are the same tasks that others have—identity, direction, relationships, autonomy, sexuality, competence, and differentiation within and from family. However, how gifted teens experience these tasks may differ from others' experiences.

High Achievers

When examined through a counseling lens, burdensome aspects of high achievement may emerge: overcommitment, overinvolvement, self-criticism, reliance on external validation, preoccupation with competition, social concerns, and an identity based narrowly on performance and outperforming others (Peterson et al., 2009). In addition, high achievers may anxiously question their ability when great effort is needed initially in a new academic area (e.g., when not bringing in prior knowledge, as is otherwise uncommon), or when not knowing what to expect, or when having only infrequent measurement of gains (e.g., in an inductively taught physics class). It is also possible that high academic achievement may reflect aspects of perfectionism, such as conditional self-acceptance, anxiety, feelings of inadequacy, belief that achievement is the key to acceptance, motivation not to disappoint someone, and fear of failure (Greenspon, 2016). High achievement may be the one aspect of life that students can control in the midst of a chaotic home life (Peterson, 2014). Beyond these possibilities, developmental stuckness might be manifested in premature foreclosure on a career path because of the influence of invested adults (Hébert & Kelly, 2006), but perhaps also because of low tolerance for ambiguity and uncertainty, a low level of emotional differentiation from parents and siblings (Peterson, 1999b), difficulty with adjustments to the college environment (Peterson, 2000), and low autonomy (Peterson, 2009). Being aware of these possibilities can help school counselors appraise high achievers holistically and build a relationship with an open, one-down, nonexpert, learner posture.

Underachievers

When looking at underachievement through a counseling lens, a school counselor can reframe it in several ways. Underachievement might represent strengths: courage, independence, ability to view the world critically, and ability to chart one's own course. It might also reflect a sense of competence and positive self-esteem. Active exploration of identity, which has been associated with high ability (Erikson, 1968), can contribute to conflict with parents (Kidwell et al., 1995), and underachievers may be actively involved in that exploration. On the other hand, underachievement might reflect a learning disability, low self-esteem, depression, an atypical learning style, creativity that is not accommodated at school, or a style of expression that is a poor fit in the classroom. Underachievers might not receive important feedback about capability if they do not purposefully challenge themselves academically (Rimm, 2008), but a school counselor might find evidence of strengths in a student's file if the latter doubts them. Purposefully avoiding strident cheerleading, blaming, or shaming language and focusing first on identifying personal strengths and establishing a therapeutic relationship may offer a new route to emotional well-being and possible change.

Epitomizing the importance of a therapeutic relationship, even if not in a school setting, psychiatrist and psychotherapist Grobman (2006) concluded that the term *underachieving* described many adolescent clients (ages 14–25) who had extreme, high-end talent and had considerable supportive and nurturing feedback. They presented with anxiety, depression, self-destructive thoughts and behavior, and stalled achievement. Aspects of giftedness reflected in their personality were a drive to explore, master, and express; special sensory sensitivities; aesthetic sensibilities; early awareness of ethics and dilemmas of existence; a strong sense of self when younger; oppositionalism; poor self-discipline; and poor frustration tolerance—the last three seeming to fit with underachievement. Unique talent-area strengths had led to personal vision, sense of destiny, charisma, confidence within their field, identifying with performance heroes, and arrogance—but also ambivalence about their giftedness. Unlike common responses of victims of abuse or deprivation, these patients were characterized by excessive criticism of others, conflicted grandiosity, and manipulation of teachers and parents. Underachievement and self-destructive behaviors were associated with an increasing sense of strangeness and isolation, flaunted self-injury, guilt over effortless success, imagined envy by others, self-criticism, rudeness, social withdrawal, anxiety about injury or disability, contempt for teachers and mentors, rebellion against prolonged dependency, and fears about inadequacy and a dulling of mind and talents. Underachievement and self-destructive impulses also appeared to reflect fears that giftedness was distorting them as human beings.

Grobman's (2006) extremely talented clients initially were suspicious that therapy would compromise their giftedness. But gradually the process involved education and guidance, which generated insight. As clients developed trust in the therapist and with the therapeutic process, they began to express conflicting emotions previously repressed, to examine them, to feel less freakish, and to make underachievement and self-destructive impulses less necessary.

Like high achievement, underachievement may be the one aspect of life that is controllable (i.e., choosing not to invest) in the midst of difficulties elsewhere, and that possibility might have characterized the underachievers described in this section. Developmental stuckness might appear in the form of "paralysis" in response to underachievers' own and others' high expectations (Peterson & Peters, 2021) and low levels of emotional differentiation (e.g., high emotional reactivity to others in the family; Bowen, 1978; Peterson, 2002). It is important for school counselors to resist embracing assumptions that underachievers are simply lazy, that parents are not invested, or that teachers are not competent and concerned. When school personnel are not aware of some students' high ability, perhaps because identifying giftedness is often a unidimensional process (Rizza & Morrison, 2003), counselors can play an important role in calling attention to exceptional ability when it has been apparent during individual or small-group counseling sessions or on standardized assessments, but not in the classroom. Conveying that kind of respect to a student whose high ability has been unrecognized at school in the past will probably be a step toward establishing a counseling relationship.

Tips for Building the Counseling Relationship

The following admonitions to counselors are related to forging a therapeutic relationship with gifted students. They reflect some of the themes in this chapter.

- Consider that gifted kids may believe that counselors will not understand them.
- Consider that home and community life can be as complicated for both high- and low-achieving gifted kids as it is for others their age, regardless of socioeconomic status.
- Remember that gifted kids are developing—works in progress.
- Assume that they would like to be seen as more than just performers or nonperformers.
- Assume that other significant adults, perhaps preoccupied with performance or nonperformance, may not attend to gifted students' social and

emotional concerns. As a counselor, you may be the first adult to enter and invest solely in that realm.
- Remember that giftedness can be experienced as both asset and burden.
- Consider that achievement may not be the most salient aspect of life for gifted kids.
- Regardless of their level of ability, remember that you know more about counseling than they do. Focus on doing your job. Rely on your skills. Be 100% present.
- Remember that gifted kids can handle abstractions, think complexly, and self-reflect.
- Help them express emotions even if they prefer to intellectualize.
- Enter their internal world with respect and nonjudgment.
- Keep learning. Encourage them to teach you about themselves—and about giftedness. That process will be important for their personal growth.

Conclusion

In this chapter, several areas addressed are pertinent to building a counseling relationship in a school setting: gifted students' attitudes about asking for help, the importance of the initial meeting with a student, the potential effect of counselor bias, the importance of acknowledging the asset-burden paradox of giftedness, the importance of applying basic counseling tenets, cultural competence related to ethnicity and giftedness, and the salience of developmental tasks. Keeping all of these in mind might help school counselors at any school level enter the complex world of gifted students appropriately and develop collaborative, productive relationships.

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SECTION V

School-Related Issues

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CHAPTER 27

School-Related Issues: Identifying Students With Gifts and Talents

SUSAN K. JOHNSEN

Identification of gifted and talented students varies from state to state, from school district to school district, and even between schools within the same district. This variation is due primarily to the lack of a federal mandate in gifted education. Therefore, each state develops its own definitions, policies, rules, and regulations. For example, in the latest *State of the States in Gifted Education* survey (National Association for Gifted Children [NAGC] and Council of State Directors of Programs for the Gifted [CSDPG], 2020), although 38 states require the identification of gifted and talented students, only eight states require specific criteria or methods for identifying gifted and talented students at the state level and 19 at the local level. The other 24 states do not mandate specific criteria or methods. This chapter, therefore, will examine best practices in important areas of identification—use of multiple criteria, characteristics of the identification processes, interpretation of data and student selection, and inclusion of special populations—so that school psychologists and counselors can support educators in identifying students with gifts and talents.

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Multiple Criteria

The purpose of using multiple criteria for identification is to ensure that all students with gifts and talents receive programming and services in gifted education. Using multiple assessments is important for several reasons.

First, the gifted population is quite diverse (Johnsen, 2018a). They have needs along a continuum of abilities and in a diverse range of cognitive and affective domains (see definition, NAGC, 2019b). Given this diversity, no single assessment is able to sample all of the behaviors that might be demonstrated by students who have talents in multiple and/or different domains (e.g., mathematics, language arts, social studies, science, the arts, leadership, creativity). For example, a student with a talent in mathematics would not be identified with the same assessments as a student with a talent in the performing arts area. Second, individual assessments are based on different theories and models and thus different goals for services in gifted education (Cattell, 1963; Gagné, 2005; Spearman, 1923; Subotnik et al., 2011). For example, Subotnik et al. (2011) looked at gifted education programs as developing talents into scholarly productivity or eminence, whereas Gagné (2005) examined the catalysts needed for developing gifts into talents. Even within a more general ability area such as intelligence, assessments may vary in terms of the abilities they sample and the formats of the items (e.g., verbal vs. nonverbal vs. performance) so that a student might perform quite differently on two different assessments that measure the same trait (Acar et al., 2016; Naglieri & Ford, 2003). Third, gifted students may perform differently from a normal sample on the same assessment. If a test does not have enough ceiling, gifted students may even perform more poorly than their average-ability peers. For this reason, professionals in gifted education recommend out-of-level tests so that a gifted student is able to show all of their knowledge and skills in a specific domain (Lupkowski-Shoplik et al., 2003). Fourth, different sources of information, such as parents/guardians, peers, teachers, or counselors, may provide different perspectives of the same student, because gifted students may show more of their abilities at home, with friends, or in other settings than at school. Disparate performance may also result from gifted students not having an opportunity to explore their interests or from important others (e.g., friends, teachers, or parents/guardians) not understanding or approving behaviors associated with giftedness (L. J. Coleman & Cross, 2005). In other cases, teachers' referrals may be influenced by preconceived conceptions of giftedness related to gender stereotypes, academic achievement, socioeconomic background, verbal ability, and social skills (Elhoweris, 2008; Ford, 2010; Siegle et al., 2016; Siegle & Powell, 2004; Speirs Neumeister et al., 2007). Finally, multiple criteria provide more validity to the entire identification process. By using multiple sources and

multiple types of assessments that are aligned with the talent domains, and by triangulating all of the data, psychologists, counselors, and other professionals can be more confident in the results.

Multiple assessments used in identifying gifted students include traditional intelligence and achievement tests, teacher checklists, portfolios, peer and self-nominations, auditions, interviews, parent questionnaires, products, and activity checklists. (See Robins and Jolly [2018] for a review of quantitative assessments that are used in identifying gifted and talented students.) These assessments need to be technically adequate in terms of their norming population, reliability, and validity and should also consider the characteristics of the program. For example, a program for students with talents in the field of music would have different assessment criteria than one for students with talents in mathematics. Examples of mathematics assessments might include achievement tests and problem-solving products, whereas for music compositions, performance auditions would be more appropriate.

The selection of multiple assessments also needs to consider any special student characteristics. For example, English language learners need to be tested in their native language or with nonverbal assessments, and children with disabilities need to be tested in their areas of strength with modifications made for their areas of needs. Because limited experiences may also influence the performance of young children from lower socioeconomic backgrounds, these students may need to be assessed using different methods (e.g., problem-solving activities in school, alternative assessments, or rates of acquiring new knowledge; Johnsen, 2018b).

In summary, multiple criteria are used because (a) the gifted population is diverse, (b) different models and theories support different types of assessments, (c) student performance varies within and across assessments and environments, (d) sources vary in their perceptions of student abilities, and (e) more criteria can provide greater validity to the identification process. To ensure that each gifted child receives services, professionals in gifted education need to select a wide range of qualitative and quantitative assessments that are technically adequate, consider special student characteristics, and are aligned to program services.

Process for Identification

According to the 2019 Pre-K–Grade 12 Gifted Programming Standards (NAGC, 2019a), "educators need to create a classroom environment that encourages students to express their gifts and talents and collect multiple types of assessment information so that all students have equal access to the identification process" (p. 8). The identification process needs to (a) be comprehensive (e.g., Pre-K to grade

12), (b) be cohesive (e.g., programming is sequenced and continuous across all grade levels), (c) be ongoing (e.g., it can occur at any time), (d) use technically adequate assessments that relate to services, and (e) identify students' abilities, interests, strengths, and needs (see NAGC, 2019a, Standard 2.2). Identification policies also need to address "informed consent, committee review, student retention, student reassessment, student exiting, and appeals procedures for both entry and exit from gifted program services" (see NAGC, 2019a, Standard 2.2.1, p. 8). The outcome for all of these standards-based policies and practices is to ensure that all gifted and talented students are identified, served, and representative of diverse backgrounds (see NAGC, 2019a, Standards 2.2 and 2.3).

To provide greater access to the identification process, some schools provide talent development opportunities (i.e., front-loading) to students from underrepresented populations (Briggs et al., 2008; Siegle et al., 2016), others incorporate the identification of gifted students within a Response to Intervention process with differentiated activities at Tiers 1 and 2 (M. R. Coleman & Johnsen, 2011), and others choose to administer all of the assessments to *all* of the students (i.e., universal screening) to avoid missing any students with potential (McBee et al., 2016). The identification process may therefore vary, with some schools waiting for teacher or parent referrals and others implementing a two- or three-phase process, which includes assessment administration and committee decisions regarding a student's need for services.

Johnsen (2018b) described a three-phase process that includes nomination or referral, screening/assessment, and selection/placement. During the *nomination or referral* phase, *all* students are considered. Nomination assessments may include group intelligence and achievement tests, teacher and parent checklists, peer and self-nominations, portfolios of work, and student background information. During the *screening/assessment* phase, a school committee selects some of the students for further screening using multiple sources and measures to ensure equal access. Depending upon the state or local education agency's rules and regulations, a certain percentage of students are included in the screening (e.g., 25%–30%). Assessments may include individually administered measures or methods that allow for more clinical observations. During the final phase of the identification process, *selection/placement*, the placement committee examines all of the data that have been collected on each child during the previous two phases. The placement committee then determines which students need gifted programming. The number of students receiving services may vary based upon the number of programming options, the number of students whose characteristics indicate a need for services, and the school's policies and resources. The committee may design an individual plan for the student that identifies long- and short-term goals, classroom activities, and evaluation. It is recommended that individuals

who are involved in any phase of the identification process receive professional learning in the nature and needs of gifted and talented students (Harradine et al., 2014; Speirs Neumeister et al., 2007).

Interpreting Data and Selecting Students for the Gifted Program

During the phases of identification, the committee reviews the data to determine whether or not the students should be tested further, receive specialized programming, or be placed in different program options with other students who have gifts or talents in the same domain. These data may be organized in a case study format (see Figure 27.1). As can be seen in Figure 27.1, the assessment data are organized by phases (e.g., nomination/referral, screening, and selection). In this example, the parents nominated their son for the gifted education program. The background information indicates that David, who was born in August, is a young third grader when compared to his peers. His age may influence some of his behaviors in the classroom or his performance on some of the assessments if the committee does not provide age-related norms. There do appear to be discrepancies in the perspectives of the individuals regarding David's characteristics (e.g., the teacher's perspective vs. the parents' perspectives) and also in David's performance on achievement subtests. His relative areas of strength are in science and math, and he has a strong interest in music. Upon reviewing the referral assessment data, the committee notes that David has met the school district's standard, the 90th percentile, which is sufficient to recommend him for further assessment. During the screening phase, the counselor administers the *Screening Assessment for Gifted Elementary and Middle School Students–Third Edition* (SAGES-3; Johnsen & Corn, 2019), the committee interviews David, and David submits a portfolio of his best work. All of this information is considered in the committee's final recommendation, which is to place him in the gifted classroom for science and math, develop his talent in music, and assist the general education teacher in differentiating the curriculum. The counselor will also be involved in observing his social behaviors in the classroom to determine if he needs any support with time management skills and to assist him as needed in developing relationships with adults and peers.

Although the use and interpretation of these data appear to be relatively straightforward, these obstacles do exist when schools organize data for decision making (Johnsen, 2018b):

- **Weighting.** Sometimes more weight or importance is assigned to a single assessment, which undermines the multiple criteria process and the oppor-

Figure 27.1 *Case Study*

Name: David Brown DOB: 8/3/2012 (8 years) Home School: Emerson/Grade 3
Teacher: Ochoa Review Date: 3/18/2021

I. Nomination/Referral Phase					
Qualitative Assessment	**Comments**			**Date**	**Criterion**
Parent Referral	Enjoys the Discovery Channel at home; collects insects; interested in music; highly recommends			3/1/2021	Yes
Counselor Referral	Likes science; participated in school science fair; recommends			3/15/2021	Yes
Teacher Referral	Enjoys hands-on activities; easily distracted; has reservations about his maturity			2/20/2021	No
Quantitative Assessment: ITBS	**Minimum**	**Subtest**	**Range (90%)**	**Date**	**Criterion**
Reading	119 (90th)	115 (84th)	108–121 (6 points)	1/15/2021	Yes
Math	119	125 (95th)	119–131	1/15/2021	Yes
Science	119	119 (90th)	113–125	1/15/2021	Yes
Social Studies	119	110 (75th)	104–116	1/15/2021	No
Total	119	121 (92nd)	115–127	1/15/2021	Yes
Screening Committee Recommendation Date: 3/21/2021	Comments: Student appears to have an interest in science and is recommended for additional screening.				
II. Screening Phase					
Quantitative Assessment: SAGES-3	**Minimum**	**Subtest**	**Range**	**Date**	**Criterion**
Verbal	119	120 (91st)	116–126 (6 points)	3/21/2021	Yes
Nonverbal	119	135 (99th)	129–141		Yes
Total Reasoning	119	135 (99th)	130.5–139.5		Yes

Figure 27.1, *continued*

II. Screening Phase, *continued*					
Qualitative Assessments	**Comments**			**Date**	**Criterion**
Portfolio of Work	Exhibits characteristics. He submitted a recording that showed his musical ability and videos of several experiments in science.			4/1/2021	Yes
Student Interview	Exhibits characteristics and confirmed interests in science. He also plays several instruments and enjoys music.			4/1/2021	Yes
III. Selection Phase					
Committee Decision (see signatures on the back of his plan)	Services Needed: YES	Services Not Needed	Provisional	4/15/2021	Needs gifted programming services
Comments:	David qualifies for services in the gifted classroom in science and math with differentiation in the general education classroom. His aptitude in music needs to be developed with mentors or after-school enrichment with other students who are talented in this area. The counselor will be involved in observing David's social behaviors in the classroom to determine if he needs any support.				

tunities to examine a student's relative strengths and needs. For example, norm-referenced, standardized tests, such as intelligence and achievement, might receive more weight than qualitative assessments, such as portfolios or interviews. Unless required by state rules and regulations, all assessments, if they are reliable and are valid for their purposes, should receive equal weighting. Research suggests that qualitative assessments, such as portfolios (Johnsen & Ryser, 1997) and parent nominations (Lee & Olszewski-Kubilius, 2006), relate to quantitative measures and predict future performance in gifted programs.

- **Score comparisons.** Committees may attempt to compare different types of scores (e.g., raw scores, percentiles, index or standard scores) without converting them to a common scale. In Figure 27.1, qualitative scores remained qualitative (i.e., words were used to describe the student's characteristics), and quantitative scores all used the same scale (mean of 100 with a standard deviation of 15). When comparing scores and other types of information, the committee also needs to consider the norm reference

group. For example, in some cases local norms might be used instead of national norms if the school district's population is distinctly different from national census information (e.g., the school district is predominantly Hispanic or Latino). In this case study, all of the quantitative assessments used national norms. The comparison group for the qualitative assessments (e.g., portfolio, referrals) was more local, as the committee was determining if the student needed curricular services beyond those provided in the general education classroom. In all cases, comparisons should be made to students of the same age, experience, and environment (see NAGC, 2019b). For example, young children who have summer birthdays need to be compared to others in their same age group, and students from poverty need to be compared to those from similar backgrounds.

- **Standard error of measurement.** Because all assessments have some error, the standard error of measurement (SEM) should be considered when interpreting scores. For example, on the SAGES-3, David scored 135, but the test has an SEM of 4 points, which means that if David were to take the test again, his true score might lie somewhere in the range of 131–139 (68% confidence level = ±1 SEM), 129–141 (90% confidence level = ±1.6 SEM), 127–143 (95% confidence level = ±2 SEM), or 125 –145 (99% confidence level = ±2.6 SEM). In Figure 27.1, the school deliberately set its standard at the 90th percentile (119 standard score) to take into consideration this error range. The district also considered the SEM and included the range of scores at the 90% confidence level. In this way, if David's score was within this range, he met the criterion. Having strict cut-off scores that are exceedingly high (e.g., 130 index score or 98th percentile) may eliminate students whose performance is affected by test error, which often increases at the upper ends of the bell-shaped curve due to the test's ceiling.
- **Organization of data.** Committees need to use data organization forms that are able to show a student's relative strengths and needs. The highest test score or performance on qualitative assessments is often indicative of a student's potential. Some forms collapse data into a single rating number and therefore do not provide information for examining a student's talent area needed for program planning.
- **Descriptive information.** The committee needs to consider more than the quantitative data (e.g., test scores). Portfolios, interviews, observations, and anecdotal narratives can provide information that is invaluable to examining the whole child. When these obstacles are addressed, there is a greater likelihood that the identification process has greater reliability

and validity for identifying those students who will benefit from gifted education programming.

Practices Related to Inclusion of Special Groups in the Identification Process

The underrepresentation of special groups in gifted education has been well documented (Borland & Wright, 1994; Briggs et al., 2008; Ford et al., 2020; Rizza & Morrison, 2007). Some identification processes tend to exclude these students, particularly those from lower income backgrounds and those with disabilities. Some of these processes include selective referrals (Ford et al., 2020; McBee, 2006; McBee et al., 2016), test bias (Peters, 2011; Ryser, 2018), the overreliance on traditional tests (Ford & Harmon, 2001), educators' attitudes (Allen, 2017; Frasier et al., 1995; Harris et al., 2009), and limited access to gifted programs (Borland et al., 2000; Ford et al., 2001, 2016).

Preconceptions tend to influence teachers' referrals for gifted programs (Bain et al., 2007; Speirs Neumeister et al., 2007). Particularly vulnerable in being overlooked are students who are economically disadvantaged (McBee, 2006; Plucker & Peters, 2018), who are English language learners (Esquierdo & Arreguín-Anderson, 2012; National Research Council, 2002), and/or who have disabilities (Barnard-Brak et al., 2015; Crepeau-Hobson & Bianco, 2011). Parents from ethnic-racial minorities also do not request an evaluation of their child for possible gifted and talented programming as frequently as other parents (Roda, 2017; Scott et al., 1992). Consequently, special populations are underrepresented in the first phase of the identification process. To increase the representation of special populations, schools may want to create talent development programs for underrepresented groups (Siegle et al., 2016), initiate universal screening (McBee et al., 2016), and/or develop more extensive professional development programs for teachers, parents/guardians, administrators, and others who are involved in the identification process (Cross et al., 2013; Mun et al., 2020; NAGC, 2019a; Siegle et al., 2016).

Assessments may also exclude special populations. Some of these questions might be useful in selecting assessments that minimize bias (Ryser, 2018):

- How representative is the normative sample?
- Does it include any special populations?
- Is there any cultural bias in the items or formats?
- Does the assessment provide information about its usefulness in predicting students' success in the gifted education program?

Some researchers argue that special populations do not perform well on norm-referenced, standardized tests, particularly those that contain linguistically loaded items (Ford, 1998; Ford & Harmon, 2001; Harris et al., 2009; Lewis et al., 2007) and have recommended alternative assessments (Cooper et al., 2004; Lidz & Macrine, 2001; Scott & Delgado, 2005; Shaklee & Viechnicki, 1995; Sulak, 2014). Studies have found that students from ethnic, racial, and socioeconomic minorities perform better on alternative forms of assessments when compared to traditional forms (Pierce et al., 2006; VanTassel-Baska et al., 2002, 2007).

Educators' attitudes may also exclude special populations. Educators may have low expectations for special populations of gifted students and focus more on their deficits than their strengths (Ford & Grantham, 2003; Harris et al., 2009; Johnsen & Ryser, 1994; Pierce et al., 2006). They may have cultural prejudice (Passow & Frasier, 1996) with negative reactions toward non-English-speaking students (Allen, 2017; Siegle et al., 2016) and students from lower socioeconomic backgrounds (McBee, 2006). Extensive professional learning is recommended to overcome negative attitudes, to help educators value multicultural perspectives (Ford & Trotman, 2001; Kitano & Pedersen, 2002), and to develop environments where students are able to demonstrate their gifts and talents (Johnsen & Ryser, 1994; NAGC, 2019a; Olszewski-Kubilius & Thomson, 2010).

Early intervention and access to gifted programs is key to the development of students' gifts and talents. When students from special populations are identified early and attend schools and classes for gifted and talented students, they have higher achievement than those who are placed in general education classrooms (Borland et al., 2000). General education and gifted education teachers therefore need to learn how to differentiate their instruction so that gifted students from underrepresented groups can succeed (Kylburg et al., 2007).

Support From Psychologists and Counselors During the Identification Process

Psychologists and counselors need to become informed about their state and local district's policies regarding the identification of students with gifts and talents and the research literature that describes the issues surrounding the identification process. In this way, they can become important members of the professional team that is involved in identifying students for gifted education programming and services. Psychologists and counselors can support teachers, parents/guardians, and other individuals involved in the identification process by:

- providing professional learning in understanding the characteristics of assessments (e.g., norming, reliability, validity, standardization) and the rights and responsibilities of test takers (see American Educational Research Association et al., 2014),
- assisting with the selection of instruments to be used in the identification process to ensure that they match the characteristics of the students and the program options,
- assessing students who are referred for gifted education programming by administering quantitative tests and collecting other qualitative information (e.g., interviews with the student, observations in the classroom),
- interpreting the assessment information for the placement committee and helping the committee make decisions about placement,
- advocating for those students from special populations who might be overlooked during the identification process,
- developing an individual program plan that addresses both the strengths and needs of the gifted and talented student, and
- evaluating the effectiveness of the assessment.

Conclusion

Because there is no federal mandate in gifted education, the processes used for identifying students with gifts and talents is quite varied. Standards in gifted education and research provide some guidance for selecting multiple criteria, developing an identification process, interpreting assessments, organizing data for decision making, selecting students for inclusion in gifted education programs, and including more students from special populations in programs for gifted students. With a solid foundation in these areas, school psychologists and counselors can provide the needed support that will enable the school to identify all of the students who might benefit from gifted education programming.

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CHAPTER 28

What Do Counselors Need to Know About Academic Acceleration?

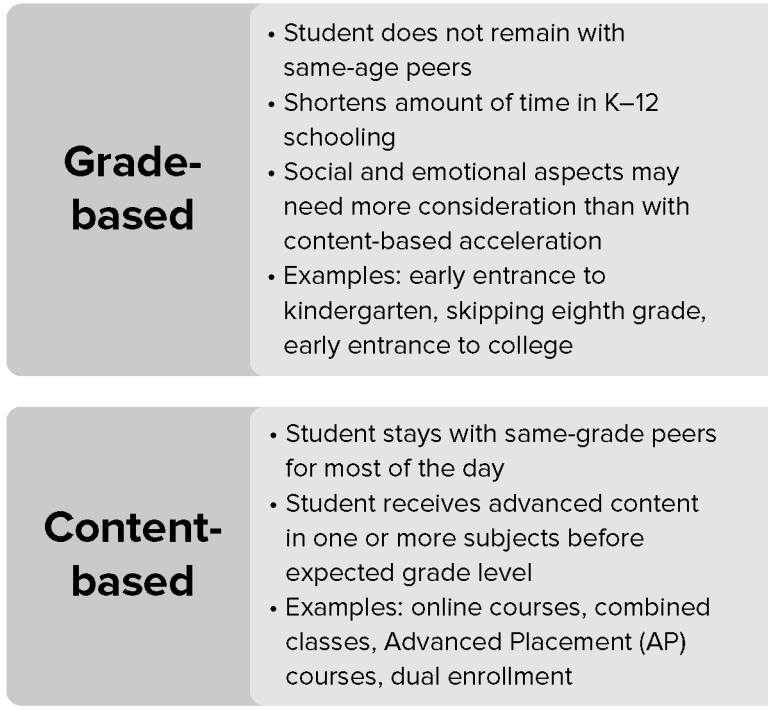
ANN LUPKOWSKI-SHOPLIK AND WENDY A. BEHRENS

The decision to accelerate a student can have far-reaching ramifications for the student and their family, especially if the student skips a grade. When properly implemented, acceleration usually results in positive growth for the academic and social-emotional well-being of the student. The benefits of acceleration extend beyond the student's K–12 experience into postsecondary settings (Assouline et al., 2009, 2017; Behrens & Lupkowski-Shoplik, 2020).

Acceleration is used to match the level and pace of curriculum to the aptitudes and achievements of an academically talented student. Pressey (1949) defined it as an educational intervention that moves high-ability students through an educational program at a rate faster or at an age younger than typical. Acceleration is often broken into two broad categories: grade-based (where students skip a grade or enter school early) and subject-based (where students move forward in only one or two subjects and stay with their age-mates for the rest of the day; see Figure 28.1). Acceleration doesn't always mean skipping a grade; there are many different ways for students to accelerate their learning. In fact, there are at least 20 different types of acceleration (Southern & Jones, 2015; see Table 28.1). Counselors receive little training in academic acceleration for gifted students (Peterson & Morris, 2010; Wood et al., 2010), yet are expected to participate in decisions about acceleration for gifted students. Acceleration is well-supported by research (Assouline et al., 2015), and counselors need to be informed about this research

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Figure 28.1 *Two Categories of Acceleration*



Note. Adapted from *Acceleration 101* [Presentation], by S. G. Assouline, A. Lupkowski-Shoplik, & R. Lange, 2020, Illinois Association for the Gifted and Talented, Naperville, IL, United States.

as well as about the tools used to make informed, objective decisions. This chapter provides counselors with the facts they need to help make decisions about acceleration and to talk with students, families, and educators about the potential impact of such a decision.

Who Is Ready for Acceleration?

Good candidates for acceleration show advanced academic ability, high aptitude for future learning, and strong achievement in school. Testing helps to determine the students' aptitudes and achievements and if they are ready academically for grade-based or subject-based acceleration. Students not ready for acceleration might benefit from such options as differentiation in the regular classroom, enrichment activities, and participation in academic competitions.

Table 28.1
Selected Forms of Acceleration

Type of Acceleration	Definition
Early admission to kindergarten or first grade	Students enter school before reaching the minimum entry age as determined by the state or district, or kindergarten and first grade are combined in one year.
Whole-grade acceleration (also called grade-skipping)	Students are placed in a grade level ahead of chronological age peers.
Early entrance into middle school, high school, or college	Students enter the next level of school at least one year earlier than expected as a result of other accelerative opportunities.
Concurrent/dual enrollment	Students take a course at one level and receive concurrent credit for a parallel course at a higher level.
Subject-matter acceleration (also called content-based acceleration)	Students take classes with older peers for a part of the day in one or more content areas.
Combined classes	Multiple grades are taught in the same classroom, providing opportunities for younger students to engage academically and socially with older peers.
Curriculum compacting	The curriculum is adapted to include fewer introductory activities and less repetition. This does not always result in placement in a more advanced curriculum.
Mentoring	Students are paired with mentors providing advanced or faster paced instruction. The student may or may not receive credit for this advanced work.
Extracurricular programs	Students enroll in afterschool or summer programs or courses providing advanced instruction and/or credit.
Distance learning or online learning courses	Students enroll in courses offered by an organization outside of their school.
Advanced Placement (AP)	Students enroll in courses offered at their high school and/or take AP tests. High scores on AP exams may earn students advanced credit in college. Students may take the exams without taking the course first.
Credit by examination	Students receive advanced credit for successfully completing some form of mastery test or activity.
Accelerated/honors high school or residential high school on a college campus	Students attend a selective high school program designed specifically for gifted students.

Note. Information adapted from Southern and Jones (2015). Several forms of acceleration were not included in this table, due to space limitations.

Factors in addition to academic achievement are also very important when making decisions about acceleration, including both social and physical development. Does the student fit in well and have friends who are either the same age or older? Having older friends may make the transition to a higher grade easier. Being physically bigger than age-mates may be an advantage if the student moves up a grade, as the age difference will be less obvious. Differences in size and physical development tend to be more noticeable in the younger grades. However, research shows that it is actually easier to accelerate in the younger grades before students have had the time to form friendships (Robinson, 2004). There is also less concern about gaps in a student's academic background if they enter school early.

When making the decision about acceleration, a tool such as the Iowa Acceleration Scale (Assouline et al., 2009) can serve as an objective means of gathering important information. Conversations with teachers, principals, and school professionals are also useful components of making an acceleration decision because these stakeholders can respond to concerns and offer alternative options if acceleration is not recommended.

What Does the Research Say?

Although researchers have gathered a great deal of information about the impact of academic acceleration on gifted students over the last 70 years or so, counselors typically do not study that research during their training. Rather than providing an exhaustive research review here, we present a number of findings that are important for counselors.

Short-Term Impact

The goal of accelerating a student is to find the right level of academic challenge for that student. Educators want accelerated students to be challenged and engaged while also performing at a high level (earning A's and B's) in school. For the majority of students who are accelerated, the short-term impact is positive (Rogers, 2015; Steenbergen-Hu et al., 2016). For example, accelerated students experience increased engagement in school, earn higher grades than nonaccelerated students (McClarty, 2015b), and seek further opportunities by taking challenging courses after the initial acceleration. Regardless of the type of acceleration utilized, acceleration produces significant academic gains (Rogers, 2015).

Long-Term Impact

When considering acceleration, educators and parents are often concerned about how the acceleration might negatively impact the student now and in the future. Research studies conducted over many years have demonstrated that, overall, the long-term effects of acceleration are quite positive. For example, accelerated students perform well in high school and college (McClarty, 2015b), and accelerated students are more successful over the long-term than same-age peers of similar ability who do not accelerate (Wai, 2015). They demonstrate higher rates of productivity, earn more money, work in more prestigious occupations, and increase their incomes faster than older peers who had not accelerated (McClarty, 2015a). Longitudinal studies have shown that accelerated students produced more creative output (such as professional journal publications and patents) as adults compared to their intellectual peers who had not accelerated (Park et al., 2013; Wai et al., 2010). In other words, the long-term impact of acceleration is both positive and important.

Social-Emotional Impact

Educators and families are often concerned that acceleration will negatively impact students' social lives or their psychological well-being. The research does not support that concern. For example, when examining many different research studies, Rogers (2015) found that accelerated students fared about the same or slightly better than nonaccelerated students in this arena.

Acceleration can benefit students' social development in the short term. Gifted students may face difficulty finding like-minded peers in their current grade; acceleration might help improve this by placing them with older students with similar interests and abilities (Robinson, 2004). For example, Cross and Swiatek (2009) found that students attending a residential school for gifted students reported high levels of psychosocial adjustment and social acceptance. Research studies in which accelerated students were asked to reflect back on their experience generally reported positive results; students respond that they are pleased they accelerated. In fact, some accelerated students say they wish they had accelerated more (Bleske-Rechek et al., 2004; Lubinski et al., 2001). In other words, most students are satisfied with the decision to accelerate.

Rogers (2015) reported that accelerated students experienced negligible or small positive benefits socially and psychologically compared to others who were not accelerated. That is, acceleration did not have a negative impact on the students who were accelerated. That finding has been replicated in longitudinal studies, including a very recent study. When reporting the results of a 35-year study

of thousands of students, Bernstein and colleagues (2020) concluded that the concerns about the possible ill effects of acceleration on students' social-emotional health are "fruitless." They stated, "there is little evidence that academic acceleration has negative consequences on the psychological well-being of intellectually talented youth" (p. 8). Therefore, concerns about the impact of acceleration on a student's social-emotional health should not stop counselors or educators from beginning the conversation about acceleration for a particular student. In fact, knowledge of the significant *positive* effects of acceleration on students' academic experiences should encourage counselors or educators to initiate that conversation.

Characteristics of Successful Candidates

Students who are good candidates for acceleration show advanced academic ability, strong achievement, and high aptitude for future learning (Assouline et al., 2009). Individual or group testing in the ability, achievement, and aptitude domains is an important piece of the puzzle when determining readiness for acceleration, especially a grade skip. Physical and social maturity are additional considerations. Although physically mature students may initially appear to be better candidates, the differences tend to become less noticeable over time. Likewise, students with older friends, and those able to form friendships easily, may find the transition to a new grade less of a challenge than those whose social skills are just beginning to develop. Classroom teachers can help ameliorate the situation by recommending that students who lack well-developed social skills participate in a "friends' group" facilitated by the school counselor. Small-group counseling has frequently been shown to help students to build supportive relationships with their classmates.

Group work in schools represents an integral domain in the American School Counselor Association's (ASCA) National Model of competencies (ASCA, 2019). ASCA noted that a group setting creates a climate of trust, caring, understanding, and support that enables students to share their concerns with peers and the school counselor. Further, scouting, special interest groups, athletics, Talent Search programs, and other out-of-school small group opportunities help younger and older students to practice social skills and find new friends. All of these activities can help make the transition to acceleration smoother.

Successful whole-grade acceleration is contingent on four domains: academic talent, social connections, a supportive school infrastructure, and planned transitions, as shown in Table 28.2. Testing will determine the level of the student's academic talent as well as gaps in their knowledge and skills, and readiness to learn in the new grade or advanced class. Indicators of social maturity are often

Table 28.2
Evidence of Successful Whole-Grade Acceleration

Academic Challenge	
Successful Acceleration	**Cause for Concern**
Student is motivated and enthusiastic about acceleration.	Student is resistant to acceleration.
Student is challenged but not overwhelmed by classroom work.	Classroom work is either too easy or too hard.
Student fully participates in classroom activities.	Student does not participate in classroom activities.
Student feels their needs are recognized and addressed.	Student feels their needs are unrecognized and have not been addressed.
Student spends an appropriate amount of time outside of school studying and on homework.	Student either spends too much or too little time outside of school studying and on homework.
Student is happy, emotionally healthy, and well-adjusted.	After 4–6 weeks the student is unhappy and regrets the acceleration.
Social Connections	
Successful Acceleration	**Cause for Concern**
Student makes new friends and retains old friends.	Student is isolated and without friends.
Student participates in activities outside of school with former classmates or age-mates.	Student has no connection to former classmates or age-mates.
Student engages with new classmates at lunch, at recess, and in other activities.	Student eats alone, does not engage with others outside of class, and is increasingly isolated.
Student enjoys school and has a positive attitude about attending class.	Student dreads school or is reluctant to attend.
Student appears to be happy, confident, and emotionally healthy.	Even after 4–6 weeks, student exhibits heightened levels of anxiety, loss of appetite, sleep disturbance, or other health concerns.
School Infrastructure	
Successful Acceleration	**Cause for Concern**
School has a systematic process and policies in place for making decisions about acceleration that include both academic and social/emotional needs. This process includes consideration of the various forms of acceleration.	School approach to acceleration is subjective, not supported by data, and does not consider social-emotional needs.

Table 28.2, *continued*

School Infrastructure, *continued*	
Successful Acceleration	**Cause for Concern**
Staff have been trained in acceleration procedures and policies and understand its positive impact.	Staff are uninformed about the research and practices about acceleration.
School staff are aware of students who have received a whole-grade acceleration and are prepared to assist in the student's transition.	School staff are unaware of the student's acceleration.
Receiving teacher is supportive of acceleration.	Receiving teacher is biased against acceleration.
Student meets regularly with a school counselor or staff member during the transition to acceleration.	The school has not provided a system for regular check-ins during the transition to acceleration.
A school staff member communicates with parents on a regular basis, especially at the beginning of acceleration.	There is little communication with parents.
Transitions	
Successful Acceleration	**Cause for Concern**
The academic assessment has identified gaps in the student's knowledge, and a plan is in place to address these gaps.	Gaps in knowledge have not been considered.
Student meets the receiving teacher and visits the classroom before the first day of class.	There is no preparation for the acceleration.
Student participates in transition activities to prepare for entering the new building, which might include learning how to use a locker, familiarity with building policies, understanding the cafeteria system, and moving from one classroom to another during the day.	Student does not participate in transition activities.
The student has opportunities to meet with a counselor to discuss the acceleration and how it might have an impact on course scheduling now and in the future. Other concerns that might be discussed are issues of multipotentiality and career counseling (especially for older students).	Counseling is not available to the student.
Parents are supportive and approachable and have appropriate expectations.	Parents are pushing acceleration on the student, and student is feeling pressured.

observable and will emerge through a student interview with the school counselor. The creation of a school infrastructure of support following an acceleration requires policy and systematic planning for staffing and training. Depending on the location of the school, acceleration policy may be determined at the state or local level. Structures put in place in a school, such as meeting the receiving teacher before the first day, availability of the school counselor, and identification of knowledge gaps all make the transition easier. The points discussed in Table 28.2 might also be helpful when considering subject acceleration. However, not all of the factors will have equal weight. For example, the socialization concerns would not be as critical if acceleration is being considered in only one subject area, such as mathematics.

The Role of Assessment in Acceleration Decisions

As mentioned previously, it is important to include assessment of student ability, current achievement, and aptitude before making a decision about skipping a grade. For subject acceleration decisions, focusing on achievement and aptitude can provide the required information. Good candidates for consideration of acceleration are already performing well in school. Typically, those would be students performing in the top 5%–10% of their grade on achievement measures (including nationally normed achievement tests, such as the Iowa Assessments). Student ability can be measured using group or individual IQ tests, such as the Cognitive Abilities Test (CogAT), Stanford-Binet, or the Wechsler scales. Aptitude can be measured by an above-level assessment, such as an above-level *Iowa Assessments* for elementary students, I-Excel for grades 4–6, and the ACT for grades 7–9 (see Assouline et al. [2009] and Assouline & Lupkowski-Shoplik [2012] for more information about above-level testing).

Family Impact

Research on the impact of acceleration on families has also been positive. Case studies of individual accelerated children who had skipped at least one grade reported that the children were happier socially and emotionally and reported greater self-confidence and fulfillment after acceleration. These students tended to socialize with older students before they skipped the grade(s) (Vialle et al., 2001). In addition to confirming the importance of support following a whole-grade

acceleration, Dare et al. (2016) found that academic challenge could help reengage students who had previous negative school experiences, leading to an improved atmosphere at home.

Red Flags

Although the research about acceleration is overwhelmingly positive, there are a few situations when acceleration is ill-advised. Assouline et al. (2009), Behrens and Lupkowski-Shoplik (2020), and Rogers (2002) warned educators and parents of critical factors or red flags in which a grade skip should not occur. If one of these important issues is present and the decision is made not to grade-skip a student, other forms of acceleration might still be considered, such as subject acceleration. That student might also need additional forms of challenge to remain engaged in school. Each of the following critical situations requires additional consideration:

- when the student clearly does not want to be grade-skipped, regardless of the reason (there is a lower chance of success);
- when the child's ability, as measured by an IQ test, is less than one standard deviation above the mean (the child scores less than 115 on an intelligence test, providing evidence that the student is not ready for advanced curriculum);
- when the child would be moved into the same grade as an older sibling (sibling rivalry could worsen, self-esteem for either student may be affected, and other family dynamics may be altered); and
- when the student is currently in the same grade as a sibling (for the same reasons as given in the previous bullet point).

Other important considerations include when the student has a high rate of absenteeism due to ongoing physical or emotional health concerns, when the student lacks a supporting infrastructure either at home or in school, and when the student has not been engaged in the acceleration discussion.

Making the Decision

The role of the acceleration evaluation committee or child study team is critical in determining the need for acceleration, and the most appropriate and available learning environment for acceleration candidates. Typically chaired by the building principal or gifted coordinator, the team members often include the gifted coordinator/specialist, school counselor and/or school psychologist, an

administrator, a current teacher, a teacher at the proposed level, and a parent/guardian. Initial meetings might include only school personnel, and a parent/guardian should be included in subsequent meetings. The recommendation to offer, deny, or postpone acceleration is made following a comprehensive assessment that includes careful consideration of the student's academic, social, and emotional needs. School counselors should be included from the beginning of the discussion about all whole-grade and early entrance decisions. For sample acceleration decision procedures, see the Acceleration Institute website section on policy guidelines (https://www.accelerationinstitute.org/Resources/Policy_Guidelines).

Tools for Making Decisions

The research on acceleration has been used to help develop decision-making tools about acceleration, such as above-level testing and the Iowa Acceleration Scale (Assouline et al., 2009). These research-based tools help to guide the process and assist in making informed, objective decisions about acceleration.

Above-Level Testing

Above-level testing is a process that was developed by Leta Hollingworth (Stanley, 1990) and put to extensive use by Julian Stanley in the Talent Search model he developed (Assouline & Lupkowski-Shoplik, 2012; Olszewski-Kubilius, 2015). Put simply, above-level testing involves administering a test designed for older students to young, bright students. Above-level tests "raise the ceiling" on testing by presenting students with more challenging items. Above-level testing helps adults to discover highly talented students and assists educators and families in tailoring decisions to students' capabilities. Above-level testing has been used widely in university-based talent searches since the 1970s. A comprehensive list of these university-based talent searches can be found at https://www.hoagiesgifted.org/talent_search.htm. Schools have also conducted in-house talent searches in order to discover students who would benefit from interventions such as acceleration.

Iowa Acceleration Scale

The Iowa Acceleration Scale (Assouline et al., 2009) is designed to guide the conversation about acceleration for educators, students, and parents. It is not a test administered to a student. Instead, it is a tool used to help educators gather

appropriate information about ability, achievement, and aptitude, as well as feedback about the student's physical, social, and psychological development. All of these factors are discussed in detail to help the child study team come to consensus about the most appropriate decision for the student and to make a plan for transition to acceleration.

Integrated Acceleration System

The University of Iowa Belin-Blank Center has developed a new online tool, the Integrated Acceleration System, which is designed to assist educators and families to make decisions about four forms of acceleration: whole-grade acceleration, early entrance to kindergarten, early entrance to college, and subject acceleration. This tool helps the child study team to move through the process of assessment and data gathering through team discussion and decision making. For more information about the Integrated Acceleration System, visit https://www.accelerationinstitute.org.

Some additional tools and resources helpful in the discussion about acceleration include the Acceleration Institute (https://www.accelerationinstitute.org), *Developing Academic Acceleration Policies* (Lupkowski-Shoplik et al., 2018), the National Association for Gifted Children (https://www.nagc.org), and *A Nation Empowered* (Assouline et al., 2015).

Following the Acceleration: What Happens Next?

Successful whole-grade acceleration is dependent on a supporting infrastructure at home and in school. When school staff and the parent/guardian are in frequent conversation, they can collaborate to address specific student needs and provide a supportive environment. Establishing a communication protocol providing a structure for two-way communication between staff, parent/guardian, and the student is recommended. The school counselor typically schedules weekly check-in sessions to meet with the student and biweekly conversation with staff and with a parent/guardian during the 4–6-week transition period. Additionally, the counselor may participate in parent/guardian teacher conferences if requested to do so.

Culross et al. (2013) recommend allowing a period of adjustment that includes frequent check-ins for the student with a caring staff member in order to anticipate potential issues. School policies that articulate how long the transition period

is, specify who monitors the transition, and provide resources for the student and family will likely help the student to make a successful transition.

The school counselor's role as an advocate for students' well-being and as a valuable resource for their educational advancement is undisputed. It is precisely this role that ensures that acceleration is ongoing and student placement is appropriate.

Summary

Academic acceleration is a well-researched method of matching the appropriate level of challenge in school to the student. Although it can be intimidating and perhaps even concerning to accelerate a student for the first time, many tools and resources are available to help make the process more objective and to ensure success. Major points discussed in this chapter include:

1. Extensive research demonstrates that acceleration works (e.g., Assouline et al., 2015).
2. Acceleration enhances students' social and emotional development by placing them with like-minded peers (Robinson, 2004).
3. Accelerative opportunities support students' need for academic challenges and stimulation (Assouline et al., 2015).
4. At least 20 different forms of acceleration provide options that can be tailored to the needs of individual students (Southern & Jones, 2015).
5. Tools are available for systematically evaluating a candidate for acceleration and guiding educators, the student, and the family through the process.
6. School counselors are critical members of the educational leadership team and, because of their unique role in schools, play an important part in acceleration decisions (Colangelo & Wood, 2015).

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CHAPTER 29

Academic Planning for Gifted Students

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WHY IS ACADEMIC PLANNING IMPORTANT FOR GIFTED STUDENTS?

Academic planning involves setting short- and long-term educational goals and selecting an appropriate course of action to reach them. Like all students, gifted students need help to identify and attain academic goals, assuring they are challenged and guided to develop their abilities fully. The National Association for Gifted Children (NAGC, 2019b) defined giftedness as:

> Students with gifts and talents perform—or have the capability to perform—at higher levels compared to others of the same age, experience, and environment in one or more domains. They require modification(s) to their educational experience(s) to learn and realize their potential. Students with gifts and talents:
>
> - Come from all racial, ethnic, and cultural populations, as well as all economic strata.
> - Require sufficient access to appropriate learning opportunities to realize their potential.

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- Can have learning and processing disorders that require specialized intervention and accommodation.
- Need support and guidance to develop socially and emotionally as well as in their areas of talent.
- Require varied services based on their changing needs. (p. 1)

This definition emphasizes that gifted students require learning opportunities that will simultaneously develop their academic potential and foster their social and emotional growth, and that these services will need to change over the course of students' development to address their changing needs. In summary, gifted students need educational opportunities that will cultivate both their intellectual abilities and the psychosocial skills that support high levels of achievement.

Would you send an athlete to the Olympics without a coach and training program? Analogously, would you expect a child to become a scientist without opportunities to acquire advanced knowledge and the skills of scientific investigation, or the knowledge of the educational requirements for a career in STEM? Unfortunately, there is a pervasive attitude in many schools that gifted students will continue to develop rapidly and "make it" through school even without guidance or programs and services designed specifically to meet their needs. Research shows that the critical psychological principles that govern learning and achievement of heterogeneous groups of students apply to gifted students as well, but must be implemented differently given their advanced learning capabilities (American Psychological Association, Center for Psychology in Schools and Education, 2017). Too often, educators assume that because gifted students are smart, they have the skills to navigate through the educational system successfully, will always be sufficiently motivated, will opt for challenging coursework, will always perform at high levels, and will find their way to the appropriate college major and university without much help. But this is not the case. Not receiving services matched to their learning and psychosocial needs often leads to boredom and frustration, poor study skills, disengagement, and, ultimately, underachievement and lost talent (Rimm, 2008). Research shows that gifted students do have better metacognitive skills and knowledge of learning strategies than nongifted students, but they do not apply nor practice using them unless guided by teachers who provide sufficiently difficult and complex content and opportunities to practice (Stoeger et al., 2015). These skills and others that support achievement can be actively cultivated via appropriately designed learning opportunities (Farrington et al., 2012).

Research and literature reviews exploring the experiences of eminent adults suggest that there are a number of factors critical to talent development (Subotnik

& Olszewski-Kubilius, 1997; Subotnik et al., 2012), including both academic and affective components that need to be part of academic planning for gifted students. Academic factors include access to skilled teachers with advanced content knowledge and opportunities to engage with complex and sophisticated content. Other teaching- and learning-based factors include opportunities for competition to test one's skills, systematic and continuous program opportunities to pursue advanced study in an area of talent, opportunities to do authentic work guided by adult professionals who can share professional standards and tacit knowledge about careers, and college and career counseling.

Social and affective factors include access to mentors, time with intellectual peers, support for achievement and personal development especially during difficult times, and instruction in the acquisition of psychosocial skills that promote success (tolerance of exploration, risk-taking, and task persistence) and support high levels of achievement (resilience). Each of these factors is described in more detail in Table 29.1.

For all learners, but for gifted students in particular, intellectual development "is a byproduct of the contextualized and meaningful engagement students have when confronted with a compelling problem and when able to acquire the knowledge, skills, and dispositions to solve it" (Pace Marshall et al., 1998, p. 3). Optimal learning experiences are ones in which the learner achieves a state of flow—where the challenge level requires the learner to reach and develop new knowledge and skills but is not overwhelming or too demanding as to create anxiety (Whalen, 1998). Achieving this match between the student and the learning environment is the task of educators and results in cognitive growth and increased motivation and engagement.

Why Is Academic Planning Different for Gifted Students?

Gifted students typically learn at a faster pace and with the capacity for greater complexity and breadth than their peers. They may also have a vast store of prior knowledge, multiple areas of strength, and a variety of passions. At the same time, gifted students vary significantly in language, culture, learning preferences, and social-emotional development. These characteristics mean that one approach or program will not meet the needs of all students, and any approach to academic planning must be adaptable to the needs of the students being served. For example, some students come to school already advanced in their knowledge, having had many opportunities to learn in their early environments, and are candidates for accelerated placement in math or language arts. Other students

Table 29.1
Factors Promoting High-Level Talent in Eminent Individuals

Factor	Description
Access to excellent teachers	• Exceptional teachers are critical to gaining a strong foundation in a subject.
Access to advanced work in one's field of interest	• Eminent creators and performers have access to teachers and experiences at various points of development that are designed to meet a needed level of challenge and stage of talent development.
Classes structured to increase both immediate and long-term engagement	• Talent development requires expressive and instrumental rewards. Expressive rewards are pleasure within the talent domain, and instrumental rewards are beliefs that commitment and practice will lead to future achievement. • Enjoyment and understanding of future rewards are important to engagement.
Opportunities for competition	• Competition offers the opportunity to test one's level of ability against that of others who have similar interests. • It also offers public recognition for success. • Competition can win individuals access to additional programs and services.
Access to tacit knowledge from mentors and parents	• Learners need connections to key individuals who can guide and instruct them. • Mentors and parents provide necessary direction and motivation. • Mentors also provide information on professional standards within talent domain.
Summer and extracurricular programs	• These programs are a source of tacit knowledge. • They provide access to peers and mentors. • They provide contact with adult professionals. • They provide opportunities for more authentic kinds of work.
College and graduate school	• Higher education provides high-level instruction, research opportunities, and experts in the field.
Values to live by	• Talent development requires an understanding of the importance of happiness in one's personal life and career/area of study. • Other core values include savoring the life of the mind, understanding the aesthetic components of one's field, finding happiness in creative productivity, and treasuring solitude.

Table 29.1, *continued*

Factor	Description
Grouping with true intellectual peers	• Grouping of this type provides the maximum opportunity to learn through challenges from others. • Individuals begin to associate effort with excellence, creativity, and self-esteem. • Time with intellectual peers reduces arrogance through challenges from these peers. • Intellectual peer groups help neutralize anti-intellectual school cultures.
Parental modeling/ support of habits conducive to talent development	• Parents must model expectations for achievement; standards for study, homework, and practice; involvement and interest as well as effort; and the importance of play.
Parents building supportive social support systems	• Parents must help build a social network that supports emotional and social development.
Assistance in acquiring dispositions and psychosocial skills	• Mentors and parents must promote tolerance of exploration, mistakes, and risk-taking; task persistence; tolerance for stress; and coping mechanisms.

Note. Information adapted from Subotnik and Olszewski-Kubilius (1997).

may have potential for advanced learning that is not evident in current achievement and need programs that will expose them to a variety of subjects and allow them to demonstrate and develop their abilities. Other students may have exceptional reasoning abilities that may not be obvious because they are newly learning English or their capabilities are masked by a learning disability. Programs must be customized to the school or district population, with some services customized at the student level, particularly for twice-exceptional students.

Instructional Adjustments

Learning Pace. Because gifted students often process information quickly, the rate of learning must be flexible and faster, and the learning experiences have to be complex enough to be challenging. There is ample research evidence that accelerative strategies, when used appropriately, are effective, resulting in both greater cognitive growth and student satisfaction (Assouline et al., 2015). Gifted students need to be able to move through the curriculum more quickly and typically require advanced courses at an earlier age in their areas of strength. There are many different forms of acceleration available at the elementary and middle school level (early admission to kindergarten, curriculum compacting, telescop-

ing, self-paced instruction, subject acceleration, and early entrance to high school or college) and secondary level (Advanced Placement courses, International Baccalaureate program), and multiple ways to provide accelerated coursework (e.g., online programs, independent study, dual enrollment). The type of acceleration required depends on each student's assessed abilities, needs, and characteristics (e.g., ability to work independently for online learning). Schools often offer classes in subject areas that accommodate students who are able to work 1 or 2 years above grade level (e.g., algebra in grade 6 or 7), but these may not be enough for some students who are very advanced and will need individualized educational plans that enable them to work 4 or 5 years above grade level in select areas.

Schools underuse accelerative strategies with gifted students, typically due to concerns about adverse social and emotional effects, although research does not support these concerns (Assouline et al., 2015). Acceleration is advantageous for students and a cost-effective way for schools to accommodate their learning needs. It is not, however, a panacea, as acceleration may alter the level or pacing of instruction but not necessarily the complexity. Gifted students need adjustments to both pacing and depth and breadth of the curriculum. Decisions regarding forms of acceleration require careful planning and should involve gifted educators, psychologists, and parents. The Iowa Acceleration Scale (Assouline et al., 2009) is one tool that weighs a variety of factors, including aptitude, achievement, age of the child, school offerings, and family dynamics and can be helpful in making decisions about acceleration. No accelerated student should have to stop their progress in a subject area because the school runs out of options, and no school should use the lack of advanced courses as a reason to not accelerate a student. Careful, long-term planning and use of early entrance options and online courses can prevent these situations from impeding the talent development of students.

Advanced Enrichment. The tendency in elementary and middle schools is to focus the gifted programming on enrichment, primarily because it can be done without disrupting the core curriculum and is not perceived to have negative effects on social and emotional development. These are typically within-classroom modifications or low dose (1–2 hours per week), pull-out programs.

Academically gifted students are capable of grappling with big ideas earlier than their peers, and although all students can benefit from enrichment, for gifted students, enrichment must be conceptually complex, offering them opportunities to go into greater depth on aspects of the core curriculum, study areas not typically covered, or explore connections and concepts across subject areas. NAGC's (2019a) standards for K–12 gifted programs include evidence-based practices that require educators to "adapt, modify, or replace the core or standard curriculum to meet the needs of students with gifts and talents and those with special needs such as twice-exceptional, highly gifted, and English language learners" (Standard

3.1.3) and "design differentiated curricula that incorporate advanced, conceptually challenging, in-depth and complex content" (Standard 3.1.4). The content should make use of higher level reading materials, focus on primary sources, require advanced critical thinking and problem-solving skills within domains, and emphasize the methodologies, major concepts, and tools of the domain.

For young students, enrichment can provide exposure to varied domains, such as music, dance, and art, as well as greater opportunities to learn more science, play with math, or explore advanced literature. It can be used to both develop talent and identify ability that may not be evident yet in high test scores or school achievement. Enrichment options for older students can include independent projects, competitions, mentorships, research experiences, and opportunities that let students work on a real-life problem within schools or community (Corwith, 2007). Many students find these experiences especially creative, motivating, and helpful in identifying a career interest or educational path (Olszewski-Kubilius, 2010; Olszewski-Kubilius & Lee, 2008).

Out-of-School Programming. Accelerated and enrichment opportunities can be provided in school and during the regular school day by utilizing differentiated curriculum and instruction within classrooms, special classes, or extracurricular offerings. But other important talent development opportunities come through out-of-school, or supplementary, programs. For gifted students, outside-of-school programs may be essential and provide elements of a talent development plan that cannot be obtained in school, such as opportunities to pursue additional advanced courses, take a course earlier than is allowed in school, pursue a personal passion or project, get a preview of college-level work and college life, acquire exposure to careers, work on meaningful and significant social issues and problems, test oneself against equally interested and able peers, obtain significant socialization with others with like abilities or interests, get exposure to a broader and unique range of subject areas, and receive educational and career guidance from adult professionals (Corwith, 2007; Olszewski-Kubilius & Lee, 2008).

Although there are many benefits to these supplementary opportunities (Olszewski-Kubilius, 2007; Olszewski-Kubilius, Corwith, & Calvert, 2015), there are concerns as well. Two in particular are integration with in-school programs and access. First, outside programs do not always articulate well with school-based programs and activities. They are offered through outside entities, such as colleges or universities and nonprofit or for-profit organizations. This means that the courses taken through these organizations may not count for credit or placement (Olszewski-Kubilius, 2007). It is the responsibility of all parties involved in developing the academic plan to work cooperatively to ensure that placement or credit transfers as a result of participation in a supplementary program. Second,

supplementary programs can be difficult for students to access because of location or schedule and because of cost. Depending on the type of program and its length, the cost may be hundreds or thousands of dollars, restricting access for students from low-income backgrounds. Financial aid or scholarships are often available. Learners from low-income backgrounds are even more dependent upon school personnel helping to identify outside-of-school opportunities for them, assist with applications for admissions and financial aid, and serve as a liaison between families and program administrators.

Social and Emotional Needs

Research shows that gifted children are generally emotionally healthy, socially competent, and psychologically mature (Lee et al., 2012a, 2012b; Neihart, 1999). However, they are more likely to be uneven in their development, meaning that although they are more advanced cognitively than others of the same chronological age, they may be age-appropriate in their social, emotional, and psychological development. The disparities between their intellectual abilities and physical abilities and even their emotional development can be significant, particularly at younger ages. To have the cognitive abilities of a 15-year-old and the physical maturity of an 8-year-old creates a unique set of challenges for the student and educators. Uneven development means ideas created or grasped by 10-year-old minds may be a challenge to enact with 5-year-old hands or the materials available in a kindergarten classroom. Also, because these children are taking in more complex and higher level material, they are often exposed to information that they are not yet ready to handle emotionally. They need adults to help mediate the experience and provide assurance or support. The more advanced the child is intellectually, the greater the unevenness and potential vulnerability that will need to be managed. Teachers can assist by having appropriate expectations for a cognitively advanced child, such as age-appropriate psychological maturity and social skills. Also, despite the fact that, on average, gifted children are no more likely to experience social or psychological difficulties, there is great variability among gifted children, just as within any group of students, and some students will need additional support from school psychologists for social or emotional issues.

The issue of varied development and performance levels is similar and even more important for students identified as twice-exceptional, who have both an identified area of giftedness and a diagnosed learning disability or other type of disability. These students may show very uneven patterns of achievement across subject areas and have greater risk for social and emotional issues (Foley-Nicpon, 2013). Students who are twice-exceptional require opportunities to address both the area of giftedness and receive support in attending to the disability. Academic

planning for these students requires attention to their need for more academic challenge in concert with accommodations that enable them to be successful with advanced work (Foley-Nicpon, 2013). In addition, these students are more vulnerable to emotional issues, such as low self-esteem or self-efficacy, and motivational issues that need the attention of educators and psychologists. Educational planning for twice-exceptional students requires the collaboration of gifted and special education specialists (Foley-Nicpon et al., 2011).

Although most gifted students are well adjusted socially and emotionally, they can encounter difficulties as a result of ill-fitting educational environments and lack of support and opportunity (Neihart, 1999). Contrary to popular belief, perfectionism is not inherent in giftedness, nor is anxiety or other mental health problems. Gifted students are highly varied in their personalities, temperaments, and experiences, and there is no single psychological profile characteristic of these students. However, they may have some unique psychological needs associated with striving for excellence, the demands of rigorous courses of study, or the expectations of families or teachers (Olszewski-Kubilius, Subotnik, & Worrell, 2015).

Gifted students can struggle with their identity and their relationships. They may have difficulty finding peers whom they feel support them, share their interests and values, and relate to their ways of learning. Being identified as the "nerd," particularly for girls and culturally diverse students, can create achievement-affiliation conflicts, resulting in inappropriate coping strategies such as seeking to hide one's talents out of fear of losing friends or being ostracized (Cross & Swiatek, 2009). Culturally and linguistically diverse students may experience racism as a result of stereotyping and not feel welcome in a gifted class, particularly if they are one of a few students who share their background or demographics (Olszewski-Kubilius & Clarenbach, 2012). Other gifted students lose patience with age-mates and with a lack of intellectual peers and challenge, begin to disconnect socially, and even underachieve. When some students finally meet intellectual peers and are challenged academically, they may become anxious or begin to underachieve because they fear failure or lack the study skills and motivation to handle more difficult work (Marsh, 1987).

Finding a Path

Gifted children often excel in multiple areas and have a variety of interests or passions. In school settings, this is both a positive and a negative. On one hand, students have the opportunity to pursue a wide range of possibilities for study and careers. On the other hand, time and schedules are limited, as are resources,

and students, particularly as they approach high school, may find trying to pursue multiple activities overwhelming. Or, with too many choices, they may feel pressure to succeed in everything to keep all options open.

Gifted students need help defining a path, determining their areas of greatest strength and interest, and setting their educational goals. This is important because gifted students, like all other students, have areas of greater or lesser interest and talent, possess characteristics that may make them a better match for some careers than others, and upon exposure to other talented students or adult professionals who work in the talent area, may realize that they have much more ability for or interest in one area than another. There is ample research that exceptional spatial and mathematical reasoning abilities are a better match to particular areas, notably STEM fields, while exceptional verbal reasoning abilities are predictive of careers in the humanities and social sciences (Lubinski & Benbow, 2006; Wai et al., 2005). Knowledge of these patterns, which can be apparent and measured by middle school, provide guidance to parents and educators regarding future educational and career paths for individual students as well as investment in outside-of-school programs.

Some researchers, notably Benbow and Lubinski (Achter et al., 1996), believe that the multipotentiality of gifted students is overstated—that students have multiple interests but not necessarily the same level of ability in multiple areas. One of the reasons students have difficulty assessing their abilities is inadequate testing that does not give them a true measure of their skills, highlighting the need for above-grade-level testing and/or opportunities to be judged by adult professionals in competitions, internships, or special summer programs. Through above-grade-level testing, competitions, or advanced courses, students will be exposed to high-level material and adult standards and get a better sense of their true ability in their areas of interest. For example, a student who has strengths in and a passion for both dance and art in high school by sophomore year has to decide what to pursue because each discipline requires classes on the weekends and outside of school. She is not sure which discipline to pursue. She needs the opportunity to work with professionals and engage in advanced courses (i.e., at an art institute), which can provide a more realistic assessment of her talent in a setting where she is compared to other talented performers her age (Olszewski-Kubilius, 2010). Similarly, a student may score at the 99th percentile in both reading and math on grade-level achievement tests, but in reality has much higher mathematic reasoning ability than verbal, only evident through an above-grade-level assessment with a higher test ceiling (see Chapter 33 by Corwith and Olszewski-Kubilius, this volume, on Talent Search testing). Students and parents will need help finding opportunities that can provide access to adult professionals, exposure to professional standards, appropriate benchmarks for talented

students, and above-grade-level assessment. Planning must be started early and be done thoughtfully if students want to pursue a path that keeps several areas open to them (e.g., dance and science), combines seemingly disparate interests and abilities into a career (e.g., medical illustration), or requires meeting benchmarks for achievement early and continuously (e.g., medicine).

Academic counseling is especially important for gifted students who come from low-income families or would be the first generation within their families to attend college. Research shows that these students attend schools with fewer advanced classes and are less likely to take them even when they are available within their schools (Bromberg & Theokas, 2014). They tend to undermatch their college choices, despite being qualified for more selective institutions of higher education. They need early and continuous counseling and advising that explicitly addresses educational pathways for different careers and provides guidance with the college application, admissions, and financial aid process.

Addressing the social and emotional needs of gifted students requires that they have guidance and advising services from counselors trained to work with gifted students. Counselors must have competency working with culturally and linguistically diverse students, as these gifted students will potentially have special needs arising from low expectations from teachers, a lack of supportive peers or stereotyping based on race or gender, and racism (Olszewski-Kubilius & Clarenbach, 2012). Counselors will need to be especially mindful of the obstacles these students may face and work with them to develop good coping strategies and supportive social networks, as well as helping educators craft welcoming educational environments. Counselors can contribute to academic planning by ensuring that students have appropriate academic and social environments that will foster motivation, appropriate responses to challenge, the development of growth mindsets, and psychosocial skills.

When Is Academic Planning Appropriate for Gifted Students?

As with any child, planning must begin early. Gifted behaviors and advanced performance can be identified as early as preschool, but rarely are curricular modifications made—adjustments in content, pace, or instruction—at this level. This delay can have a negative effect on cognitive growth, especially for children from low-income backgrounds, who are dependent on schools for early talent development opportunities that compensate for fewer earlier opportunities to learn (Olszewski-Kubilius et al., 2018; Robinson et al., 2002).

Once a student's abilities and needs have been identified—through achievement or aptitude tests, observations, consultation with family, the provision of challenging curriculum, or other means—a plan for regular formative and summative assessments should be created in concert with a systematic and continuous educational plan for courses and talent development opportunities through high school, college, and beyond. As gifted students move through their school years, it can be a challenge for schools to provide the courses, expertise, and support they need, particularly at the secondary level. What should schools do with a ninth grader who is finishing calculus? Where should they find a mentor for a student who is doing advanced computer programming? There are a variety of options for providing these opportunities, including both in and outside of the school. Examples are online courses, Saturday classes, summer programs, and mentorships, but educators must help students plan for and access these opportunities, which should not be viewed as nice, supplemental opportunities for students who can afford them, but as essential components of an educational plan focused on talent development for a gifted child (Olszewski-Kubilius, 2009).

If a student is accelerating through courses at the high school level, it is important to plan out the course sequence through graduation as early as possible so that the student has continued opportunities, which may include early college entrance. Good planning requires a long-range look at curriculum and course sequencing so that development is never hindered and creates the least amount of stress on students, families, and school personnel.

What Should a Plan Include?

There are many educational options that can be utilized in serving gifted students appropriately. Determining which approaches will work best is a function of many factors, including school elements (e.g., student demographics, structure, budget, mission, politics, culture), student characteristics (e.g., identified strengths/weaknesses, social-emotional development, family background and support, family resources), personnel resources (e.g., staffing, expertise, professional development), and community features (e.g., size, location, cultural and educational resources available, availability of mentors).

According to Rogers (2002), a plan "must be detailed and specific" (p. 399), and include what she identified as "essential elements":

- identification of specific steps that will be taken to continue the child's academic progress and talent development in K–12 (e.g., early access to any level of schooling, within-class modifications, special classes, outside-of-school options, early college entrance);

- actions to help remediate any weaknesses, such as content gaps, study or organizational skills, and learning disabilities, particularly if an accelerative option is being considered;
- provisions for the child's psychological adjustment and development of psychosocial skills, including independent learning skills, self-regulation and organizational skills, and specialized counseling for mental health issues; and
- opportunities for social interaction with both intellectual peers and age peers through school and/or outside-of-school opportunities.

Neihart (2006) outlined three research-based principles for addressing the affective services for gifted students in a long-term plan:

- guidance and counseling services that are sustained, systematic, and differentiated while providing access to intellectual peers, appropriate academic challenge in the classroom, and flexible pacing;
- a variety of approaches and accommodations, differentiated to address differences in culture, socioeconomic status, and gender; and
- teachers, counselors, and other professionals working together to create school-based plans that are designed with purpose and grounded in best practice.

Any counseling services provided should help students understand what it means to be gifted and the process of talent development over time, particularly within domains of interest to the student; help them become advocates for themselves; develop strategies for coping with stress and challenges brought on by challenging coursework, programs of study, and any negative "stigma" attached to being gifted; and offer differentiated college and career guidance (Neihart, 2006; Olszewski-Kubilius, Subotnik, & Worrell, 2015). Some students will need additional support to cope with anxiety or depression or other factors that can impede their progress.

College and career planning for gifted students needs to start early and be planned carefully. Berger (2014) pointed out that gifted students experience sensitivity to competing expectations from parents, teachers, and peers; concerns about ownership over their decisions; and fears about taking risks that may influence how they approach the future and thus the college planning process.

To help gifted students as they think about college and careers, Berger (2014) recommended that gifted students have opportunities to participate in their academic planning and learn about a variety of colleges, not just the most academically rigorous or selective ones. In addition to conducting college visits and participating in precollege or early college programs, for gifted young people,

college and career planning should include mentorships, internships, and other opportunities to work closely with experts in their talent areas. Pressures from others may make gifted students restrict their college investigation or planning to only a few select schools or truncate their career exploration. As with any students headed for college, gifted students need to be helped to find the best match for them given their interests, abilities, temperament, personality, and values (Olszewski-Kubilius, 2010). Early and continuous college counseling is especially important for first generation college attendees who lack familiarity with higher education and may have a limited notion of potential career options.

What Resources Are Available to Assist in Academic Planning for Gifted Students?

A variety of resources are available to assist school psychologists, educators, and parents in academic planning for gifted students. These resources can be categorized into three key areas: models and standards for high-quality gifted programs, identification and planning tools, and organizations and publications.

Models and Standards for High-Quality Gifted Programs

In order to develop an effective academic plan for gifted students, one has to know and understand what constitutes a high-quality academic program. An excellent starting point is NAGC's (2019a) Pre-K–Grade 12 Gifted Programming Standards. The standards provide direction and focus for what constitutes a systematic set of programs and services. The standards are theory- and research-based.

Identification and Planning Tools

Talent Search is a program that identifies and assesses students' academic strengths and educational needs using off-level tests (see Chapter 33 by Corwith and Olszewski-Kubilius, this volume). For example, through Talent Search, a student in grade 7 is given the SAT, which is a test designed for high school students. By taking above-level tests (at least 2 years above a student's current grade placement) through a Talent Search program, gifted students, their families, and educators gain a much more accurate and detailed understanding of where the student stands in relation to their gifted peers and what level of educational challenge is appropriate.

There are several university-based and independent centers for gifted education across the United States that conduct Talent Search programs annually, including the Center for Talent Development at Northwestern University, the Center for Talented Youth at Johns Hopkins University, and the Center for Bright Kids. All of these programs include the same core components that aid in appropriate placement and educational planning:

- evaluation of students' abilities through tests given off-level (ACT, SAT, PSAT8/9, or SCAT);
- educational placement recommendations and recommended course sequences based on test scores;
- access to talent development opportunities, such as weekend programs, summer programs, and distance education programs; and
- guidance from experts in the field and resources such as newsletters, magazines, and conferences for parents and educators.

The ready-to-use tools available through the Talent Search process make planning more efficient and effective.

Organizations and Publications

The many advocacy organizations and gifted centers across the country are great resources for networking, research, information on best practices, and more. As mentioned previously, NAGC and its state affiliate organizations offer publications and networks of experts that can assist with academic planning for gifted students. The Davidson Institute located in Reno, NV, is another excellent resource for working with exceptionally and profoundly gifted students. The Davidson Institute Educator's Guild connects educators to current information in the field.

Publications that support appropriate academic planning include *Parenting for High Potential* and *Gifted Child Quarterly*, both published by NAGC. They offer research and best practice in gifted education for educators and parents.

Academic planning for gifted students does require a differentiated, specialized approach. As described in this chapter, meeting the needs of gifted students involves attending to their unique needs, including pace of learning, asynchronous development, social-emotional issues, and variety of interests. To develop their talents fully, students need to have appropriate academic goals and guidance from knowledgeable and supportive adults. For school personnel, making use of the gifted education research and resources available is critical to success.

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CHAPTER 30

The Importance of Teaching Strategies in the Education of the Gifted

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INTRODUCTION AND RATIONALE

Instructional strategies have always been underestimated for their role in enhancing gifted student learning in both cognitive and affective areas of learning. As a field, gifted education has supported the idea that students could learn on their own without the direct facilitation of teachers. Even when teachers were encouraged to intervene, it was always with an eye to being a facilitator of learning, not a deliberate strategist in using techniques that might promote and enhance learning. Attempts to relieve boredom and frustration in the lives of gifted learners from an unchallenging curriculum or lack of peers have often gone unanswered, as have signs of depression and anxiety (Neihart, 2012). Thus, educators have not always taken seriously the models of teaching necessary to work effectively with the gifted to enhance growth in psychosocial areas of need. Yet, there are three reasons that the use of deliberate instructional strategies matter in the teaching and learning of the gifted:

- **Strategies provide content-relevant pedagogy to enhance deep learning.** Shulman (1987) cited the role of appropriate content pedagogy in enhancing student learning. Content pedagogy is embedded in the Common Core State Standards as well as in many materials related to the teaching of the core areas of learning distributed through the National Research Council

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(see NRC, 2000, 2005, 2012). Knowing how to facilitate a research project in science by asking relevant science-related questions about the research design or asking questions in a discussion of *Hamlet* about the theme of filial duty both constitute the effective use of such pedagogical approaches with advanced learners.

- **Strategies scaffold learning for gifted students in order to promote automaticity.** Strategies used deliberately can help gifted learners understand what is necessary to use in their own learning as they attempt independent projects and other forms of autonomous learning. Questioning, for example, can enable the gifted to understand how to elevate their own learning in similar ways through asking questions that require analysis, synthesis, evaluation, and creation. Students also can use questions to probe their own assumptions about their own problems and ways to address them.
- **Strategies also elevate levels of thinking.** Higher level thinking serves long-term ends to promote lifelong learning in any area of desired study. By exposing gifted students to models and approaches that can be internalized and transferred to new learning situations, students become more ready to tackle new problem scenarios with confidence in their ability to think and problem solve. This strategy may be applied to emotional and social problems as well as academic ones.

The use of deliberate classroom strategies is also important for maintaining the level of academic challenge that gifted students need, not only to maximize their achievement but also to hold their interest, keep them engaged, and stimulate their minds. Academic challenge is also needed to prevent negative social emotional consequences in the form of depression or merely boredom (Kanevsky & Keighley, 2003).

Audience for the Chapter

Because this book has an intended audience of counselors and secondarily other educators, it is important to note that these strategies are essential for all educators to employ with the gifted. Counselors who know, understand, and have used these strategies can share them with teachers who may not be familiar with these research-supported effective classroom practices. Counselors may also apply the strategies in interactions with students directly.

Although question-asking and critical thinking models are highly relevant for classrooms, they also are important as a part of how counselors work with these

students, ensuring that thinking at higher levels about their academic programs and careers is a central part of the counseling process. Because counselors are also the gatekeepers of academic planning and college selection for these students, it is crucial they understand how to use appropriate accelerative approaches in recommending options for these learners and their families.

Research-Based Strategies for Cognitive and Affective Growth

What are these skills and strategies that matter so much in promoting the holistic learning of the best students? There are a set of such strategies that teachers and counselors need to have in their arsenal, regardless of subject matter, grade level, or instructional purpose. They include: (1) acceleration, (2) questioning, (3) models of thinking, and (4) metacognition. Research suggests that these strategies have the strongest evidence for effectiveness in use with the gifted learner (VanTassel-Baska & Brown, 2007; VanTassel-Baska & Little, 2017). In addition, the use of the deliberate affective strategies of bibliotherapy, journaling, choice, discussion groups, and projects further amplifies the instructional opportunities for effective intervention on behalf of the gifted.

Acceleration Strategies

Acceleration has more than 80 years of research on its efficacy with the gifted, promoting enhanced motivation, learning, and outcome success for accelerated students in college choices and careers (Assouline et al., 2015; Lupkowski-Shoplik et al., 2018). Research on the longitudinal psychological effects of acceleration has shown comparable or more positive effects on students in the top 1% of ability 35 years after various forms of acceleration were employed, including Advanced Placement, college courses taken early, and grade-skipping (see Bernstein et al., 2020). Moreover, content acceleration of learning via fast pacing, compacting, and compression of basic material has been well-studied at all developmental levels and in many content areas and has been found to be effective to accelerate student learning (Reis et al, 2008; VanTassel-Baska et al., 2002; VanTassel-Baska & Baska, 2019).

One of the first approaches needed to engage in content acceleration is the effective *preassessment* of learning in order to determine the level of functioning of students within a domain of learning. Teachers may use a diagnostic test

that is appropriate to the desirable curriculum area to be studied and apply it at the beginning of instruction. Students then are grouped for instruction based on their scores, with advanced learners being given the opportunity to extend their learning to advanced levels at the beginning of the instructional module. Because these students can master new material more rapidly than others, it is important that instruction be streamlined for them within the grouped setting, using a "two to one" model (i.e., twice as much learned in half the time as other students). Careful use of assessments of learning can help guarantee progress and correct any gaps that might occur. Most subject areas in the common core may be implemented in this way to ensure student challenge and avoid repetition and boredom with the curriculum.

Preassessment is a critical tool for counselors to use with the gifted as well. Compiling test data, interests, and values on gifted students provides a strong basis for recommending various other forms of acceleration, such as grade-skipping and early entrance to the next levels of education, such as high school or college. It also provides insight into how to work with individual students in respect to academic planning and careers.

Question-Asking

The role of question-asking is a critical component of promoting inquiry among gifted learners. It is a strategy that organizes questions in clusters in order to elevate thinking in a deliberate way. Some questioning models are hierarchical in orientation, moving students deliberately from lower to higher level thinking. The use of Bloom's taxonomy in its newest iteration (Anderson & Krathwohl, 2001) is a common tool to enhance student learning from lower (i.e., Remember, Understand, Apply) to higher (i.e., Analyze, Evaluate, Create) levels of thought. Other models deliberately exploit different kinds of thinking, moving from convergent to divergent to evaluative as seen in the following example.

In a study of history, teachers might choose to engage students in responding to the following questions about understanding civil rights based on reading two articles that address the issue:

1. What are examples of civil rights that we enjoy in the United States?
2. How are civil rights practiced? Why are they necessary?
3. If you were protesting an act of perceived injustice, what actions would you take? What actions would you not pursue? Provide a rationale for each approach.

4. Which is a more successful route to change in our country: citizen protests or legal changes brought about by legislators? Make an argument to support your choice.

These questions may be discussed in small groups first, followed by a whole-group discussion. They may frame an introduction to a unit of study on social justice or provide a conclusion to such a unit of study (VanTassel-Baska & Baska, 2019).

Models of Thinking

To teach models of thinking to gifted learners is to engage them in lifelong learning skills that provide the scaffolding for all worthwhile learning in the future. It is "teaching them to fish" rather than ensuring they catch one fish on a given day. Because higher order thought is not formulaic, it requires being open to the moment, asking the probing question at the right time, engaging the class in the right activity based on when they most need it, and assessing levels of functioning with regularity. Teachers must provide students with useful models in order to have schema on which to hang their ideas. Finally, teachers must help students understand that real thinking is hard work, that it takes effort over time to improve, and that the outcome is uncertain.

Selecting models that enhance the learning of higher level thinking is also desirable because the utility of these models has been proven in countless classrooms (VanTassel-Baska, 2018), and research suggests that a few selected models used over time enhance learning more effectively than eclecticism (Hillocks, 1999). Several models have proven especially useful to teachers in addressing the higher order skills of creative and critical thinking in the classroom.

Creative Thinking

One of the most viable creativity models at a theoretical level is Amabile's (1983, 2001), which focuses on the relative importance of three areas: (1) domain-specific knowledge and the ability to apply it to worthy problems, (2) motivation and interest, and (3) creativity-relevant skills that support contributions to a given domain of learning. Major emphases within her model include a focus on developing products judged to be exemplary by those in the domain and the importance of contexts for nurturing creative behavior.

Another model that is instructive in addressing creativity is that of Csikszentmihalyi (2000), who studied creativity from the vantage point of adult creators who had made significant contributions to a field of study. He found

these individuals to possess a high degree of intrinsic motivation, characterized by a state of flow. These individuals whom he studied had goal-oriented tasks, time and space to concentrate on them, and the exclusion of everyday tasks that interfered with concentration.

Ochse (1990) and other researchers who have studied creative individuals in a number of different fields (Simonton, 1994; Torrance, 1993) have all been struck by the sheer work and effort that creative individuals are willing to devote to their area of specialty. Such individuals are clearly in love with the work but also continue to persevere with it over time in the face of criticism, lack of support, and much time being spent alone. The single variable that these researchers focus on, however, is the capacity and actualization of work over time.

Critical Thinking

Critical thinking requires students to make nuanced judgments and interpretations about data (Ennis, 1996). Yet it also requires students to think in various ways about data they encounter. What are appropriate inferences to make about data? How do individuals judge credibility of data sources? How do individuals analyze and synthesize conflicting data?

A model that has proven helpful to many teachers and other educators in the application of critical thinking to hypothetical and real-life situations has been Richard Paul's elements of reasoning (Paul & Elder, 2012), comprised of eight aspects that include purpose, assumptions, concepts, inference, data and evidence, and implications and consequences. The example below illustrates the model's utility in addressing current event topics in the classroom through the use of teacher-developed cluster questions:

- What is the **purpose** of our discussion on the current world economic problems or issues?
- What **concepts** in economics are central to understand what is going on (e.g., currency evaluation, quantitative easing, supply and demand issues in trade agreements, inflation and deflation)?
- What **assumptions** do we as Americans often make about the strength of our economy? What evidence do we use to support those assumptions?
- What **data and evidence** do we employ to judge the economic picture in the United States . . . worldwide?
- What **inferences** do we draw about the health of the economy under specific conditions, for example, when (1) the stock market goes down by 200 points, (2) the housing market increases in number of homes sold per month, (3) the federal reserve raises interest rates, (4) the number of jobs increases monthly, or (5) a country cannot manage its debt?

- What are the **implications** of trends in the global economy for the economy in the United States? What are the **consequences** of using the stock market as the sole factor in judging the health of the economy? What other sources of data are valuable as well?

By applying these elements systematically to different situations and events, students come to reason out both personal and real-world problems that they encounter. The model may also be used to analyze challenging text. Paul, through his Foundation for Critical Thinking, has developed a series of templates to aid students in analyzing the logic of an article or chapter assigned (Paul & Elder, 2006). The elements also work well in subsets, not using the whole model. For example, in a discussion with a student or small group of students experiencing similar problems, such as anxiety, the counselor may probe:

- What causes you to become anxious? What conditions or situations trigger such a response?
- What assumptions do you make about yourself and your behavior in such situations?
- What evidence do you use to test your assumptions?
- What are the implications of your feeling of anxiety?
- How might such feelings be alleviated by how you think about them or respond to them?

Using Both Critical and Creative Thinking: Models of Problem Solving

Another complex form of problem solving that involves both critical and creative thinking, widely applied in gifted programs and special extracurricular programs like Odyssey of the Mind and Future Problem Solving, is Creative Problem Solving (CPS; Isaksen et al., 2011). Six steps or processes characterize the model: mess finding, data finding, problem finding, idea finding, solution finding, and acceptance finding. The main characteristic of *mess finding* is to sort through a problem situation and find direction toward a broad goal or solution. In *data finding*, participants sort through all available information about the mess and clarify the steps or direction to a solution. In *problem finding*, a specific problem statement is formulated. *Idea finding* is a processing of many ideas for a solution to the problem or parts of the problem. *Solution finding* is an evaluation or judgmental process of sorting among the ideas produced in the last step and selecting those most likely to produce solutions. Finally, in *acceptance finding*, a plan is devised for implementing the good solution. An adaptation of the CPS model is Future Problem Solving, which involves the application of the CPS model to studies of

the future and to problems that are now emerging as major concerns (Videgor, 2020; Volk, 2004).

A popular model, very closely aligned to CPS, is problem-based learning (PBL), a curriculum and instructional model that is highly constructivist in design and execution. First used in the medical profession to socialize doctors better to patients' real-world concerns, it is now selectively employed in educational settings at elementary and secondary levels with gifted learners (Boyce et al., 1997; Gallagher, 1998; Gallagher & Stepien, 1996). The technique involves several important features, including (1) students are in charge of their learning, (2) the problem is real-world and ambiguous, and (3) the teacher's role is to be a metacognitive coach. These features work together in engaging the learner in important problems that matter in their world. Many times problems are constructed around specific real-world situations, such as pollution of water or air, dangerous chemicals, spread of infectious disease, or energy source problems. Students learn that the real world is interdisciplinary in orientation, requiring the use of many different thinking skills and many different kinds of expertise in order to solve these megaproblems.

The following problem and its levels of complex thinking are illustrative of a problem-based learning episode:

> Problem: *There is a lack of mass transit into and out of a central city. You are an urban planner, given one month to come up with a viable plan. However, your resources have been used on another project, that of city beautification. A new airport is about to be built 20 miles out from the city, but negotiations are stalled. What do you do?*

Higher level skills needed to address the problem include:

- analysis of what the real problem is (i.e., mass transit, airport construction, or beautification),
- synthesis of the aspects of the problem (i.e., Is there a creative synthesis of each facet of the problems noted?),
- evaluation of alternative strategies to be employed (i.e., Can I shift funds, can I employ a transportation expert, or can I negotiate with the airport deal?), and
- creation of the plan of action that will need to be sold to city council.

Solution of real-world problems requires the sustained interaction of both creative and critical thinking. Thus, gifted students can only benefit from being provided both skill sets in practical models for their use in school and in life.

Metacognition

Students also need to learn how to regulate specific learning behaviors and deliberately use executive processes in order for deeper learning to be achieved (Schunk, 2000). These behaviors are also critical for long-term project work and research. Metacognition refers to two types of knowledge: self-knowledge in respect to declarative, procedural, and conditional situations (Bereiter, 2000) and self-knowledge in respect to controlling how knowledge is used—the planning, monitoring, and assessing of the process in oneself (Beyer, 2008). Each aspect is a necessary way of conceptualizing the skills needed for gifted learners to become effective in their thinking and problem-solving activities.

Research suggests that metacognition is developmental, beginning early but continuing well into adulthood. It also appears to be more advanced in adults than children, and in gifted students rather than in typical students, especially in transferring the skills to new domains of activity (Walker & Shore, 2011). Metacognition is easier to teach to gifted learners as well, and they appear to benefit more from being taught the strategies than other learners, given a higher level of motivation. Perhaps this is due to their larger information base that supports metacognitive regulation strategies, as it is know that metacognition improves with more knowledge in a domain (Sternberg & Ben-Zeev, 2001). The findings on metacognition from the research literature strongly suggest the value of direct instruction, collaborative learning across age levels, and reflection techniques such as journaling, discussion, and introspection (Schraw & Graham, 1997), all strategies that address both cognitive and affective concerns.

Instructional Strategies for Affective Development

Although social and emotional learning or, for the purposes of this section, affective development has been a topic of interest in the development of the gifted for more than 50 years, we have recently seen a surge of interest among parents, educators, and policymakers. The current context of educational changes, and the recent shift to online learning across the world due to the COVID-19 pandemic, only intensified interest and concerns. Practically speaking, affective development matters a great deal for important life outcomes like success in school, college entry and completion, and later earnings. Research (Durlak et al., 2015) also suggests that affective development can be taught and nurtured in schools so that students increase their ability to integrate thinking, emotions, and behavior in ways

that lead to positive school and life outcomes. VanTassel-Baska (2009) described the range of interventions that can be done inside and outside the classroom with the use of an emotional framework that is integrated into cognitive areas.

This section highlights examples of research-based strategies that teachers and counselors can employ specifically to foster affective development in gifted students. They include bibliotherapy, journaling, interest-based learning, discussion groups, and project work.

Bibliotherapy

Gifted students may internalize emotional issues such as perfectionism, self-criticalness, anxiety, heightened awareness, issues with peer relationships and others due to their advanced cognitive development (Silverman, 2013). Bibliotherapy is one strategy that can assist them in developing a strong framework for understanding a specific kind of social-emotional difficulty they may be experiencing. It is intended to help students not only learn and develop new social skills, but also experience validation and insight into their own thought processes and emotions.

Research support for bibliotherapy is wide-ranging. In a case study of an English as a second language (ESL) refugee child, Cancino and Cruz (2019) found that bibliotherapy provided a vehicle for the child to process her trauma, as the child was able to identify with elements of the text and share through discussion.

Just as the name suggests, bibliotherapy is most commonly defined as facilitating psychological growth and healing through reading. It is the process of helping the reader learn about, cope with, and seek resolution for any social or emotional struggle by identifying with a character in a book who shares a similar struggle or need. Reading books in which the main character or other characters also have unique abilities and uneven development may be useful for gifted students, who may "see" themselves through the main character's experiences and then internalize a set of potential resolutions and strategies for addressing their emotional vulnerability.

Teachers and counselors can implement bibliotherapy in a variety of ways as part of an English language arts unit of study through the facilitation of literature circles or Socratic seminars, small discussion groups, journaling, book clubs, and other outlets. Because gifted readers often intensely identify with characters, teachers should be strategic about reading selections. They should select books or readings that foster intellectual and creative development through understanding characters' insights, decision making, and values. Teachers should preselect readings based on affective themes that emerge in the reading or driven by student needs. However, keep in mind that the teacher or counselor needs to have read

the book themselves and should be prepared to debrief with the student(s) the central emotional themes of the book and the challenges faced by the protagonist or other characters.

A valuable resource for selecting developmentally appropriate books is Halsted's (2009) *Some of My Best Friends Are Books*, a well-indexed annotated bibliography of more than 300 books spanning grades Pre-K–12 and targeted for gifted readers. In her book, Halsted addressed the importance of developmentally appropriate bibliotherapy while maintaining the flexibility in educational settings. She presented developmental bibliotherapy as a way for parents, teachers, librarians, and counselors to guide gifted readers by assisting them with the developmental tasks appropriate to the life stage they are experiencing. This approach may serve as a significant motivating factor for gifted readers, particularly those struggling with trying to learn more about their individual roles in a complex society.

For bibliotherapy to be effective, regardless of whether the debriefing is an informal discussion, a journal reflection, or a more structured set of activities, the teacher's or counselor's role should be in facilitating the conversation rather than judging student responses. Fisher (2009) suggested some of the following questions to guide the conversation:

- Who in the book do you identify with, and why?
- What situations/events/problems do you identify with, and why?
- What decisions does the main character (protagonist) make in the book? Why do they make those decisions? Do you agree or disagree with their decisions? Why or why not?
- How did being gifted impact the character's life (in positive and/or negative ways)?
- What do you think was the author's purpose for writing this book?

Gifted students' strengths lie in their ability to conceptualize and generalize, intellectual tasks required for working through the process of bibliotherapy. Therefore, teachers and counselors should find success in bibliotherapy as a strategy for facilitating gifted students' affective development.

Journaling

Journaling, much like keeping a diary, is a solitary activity. It allows for personal expression whether narratively or visually. Journaling is seen as a tool to promote reflection and articulation of students' thinking and problem-solving strategies (Wood & Lane, 2017). The value of journaling as a tool to engage students in reflective processes supports gifted students' metacognition and self-knowledge.

Journaling is a strategy that can be used across content areas and grade levels. It can vary in form, style, and content and be used in and outside of educational settings across the lifespan.

In a pilot study at the University of Nebraska, researchers examined the psychological impact of journaling on the personal development of college students and found that classroom-based journaling significantly increased self-efficacy (Frista, 2008). In another study, Jenkins and Clarke (2017) employed an approach called "engaged journaling" grounded in an experiential learning theory framework. The researchers collected data from a dozen college course sections across four universities and found that engaged journaling: (1) offered a more holistic measurement of student comprehension, (2) engaged potentially disengaged students, (3) enriched class discussions and cross-interaction, and (4) created additional entry points for students.

Teachers and counselors should allow gifted students flexibility while still providing structure to promote self-exploration through journaling. The nature of journaling assignments may vary; they may be unstructured, allowing students to reflect on self-identified information, or very structured, with the teacher identifying specific topics and objectives related to students' journal entries. However, regardless of the approach, the primary aim should be to have students contemplate and become more introspective. They can integrate their feelings, perceptions, responses, ideas, and thinking in real time.

Journaling reflects personal relevance, providing an effective way for gifted students to connect self and context. Clinical psychologist Beth Jacobs (2004) wrote in her book *Writing for Emotional Balance: A Guided Journal to Help You Manage Overwhelming Emotions* that "Journals are like a checkpoint between your emotions and the world" (p. 3).

Interest-Based Learning

Student choice linked to personal interest has been shown to increase gifted student motivation (Gottfried et al., 2006). When teachers allow student choice in content, process, and/or product, self-differentiation occurs because students have input into their own learning. Students become invested when the task they are working on means something to them (Betts et al., 2017). Teachers can increase the likelihood that students will value choice by analyzing how students associate feelings of autonomy, competence, and relatedness with the choice provided them (Betts et al., 2017).

According to Kanevsky (2011), deferential differentiation includes activities that begin with an awareness of what students want, so their preferences can be integrated into their learning. This does not mean teachers capitulate to students'

desires; rather, it means teachers acknowledge students' interests and preferred approaches to learning, and collaborate with students respectfully and creatively in the design and evaluation of instruction, retaining their professional imperative to ensure academic standards are met. In a qualitative study of elementary and middle school students' perceptions of their gifted and talented program, a theme that emerged for the middle school students was related to opportunities for them to make decisions about their own learning. Students wanted to expand curricular choices and have more responsibility to make decisions. One student said, "This may just be my age, but I wish we had more responsibility and choice" (Kitsantas et al., 2017, p. 276).

The challenge for teachers and counselors, therefore, is to connect areas of student interest to the classroom and to achievement by encouraging choice in content, process or product activities. Effective teachers guide students to use their ability to explore their interests as deeply as possible to explore subject matter content through multiple dimensions (Brown, 2016).

Discussion Groups

Gifted students typically learn faster, have the capacity to understand concepts at a greater depth, and concentrate on tasks longer than average-ability peers (VanTassel-Baska, 2021), thereby making discussion groups a great strategy to form the basis of a K–12 talent development trajectory in both cognitive and affective domains. In the absence of sufficient emphasis on the social and emotional development of gifted learners, students cannot fully grow cognitively. Teachers and counselors need to understand that although, for the most part, gifted students are as well-adjusted emotionally as their peers, they are prone to some potential social and emotional stressors, such as perfectionism, being self-critical, or difficulty with developing strong peer relationships (Cross, 2018). Silverman (1993) noted that "giftedness has an emotional as well as a cognitive substructure: cognitive complexity gives rise to emotional depth" (p. 3). Because of the sensitive nature of what may emerge during discussion groups, teacher training is needed. School counselors are trained to work with small groups. Therefore, using a collaborative model in which school counselors partner with teachers in incorporating affective discussion group work can be effective.

In a longitudinal study on the implementation of small-group affective curriculum with gifted students in grades 5–8, Peterson and Lorimer (2012) found that there was a positive change in students' comfort in discussion groups, ease in talking about social and emotional concerns with others (e.g., peers, teachers, and parents), the belief that affective development is as important as academic development, and a perception that the implemented program under study had

a positive effect on the school. The findings underscored "the need to clarify purpose to students, select discussion topics carefully, and provide adequate training for group facilitators" (p. 158).

Discussion groups should be intentional, well-planned, and facilitated in a way that honors the integrity of each participating student. Using discussions as a primary teaching method allows teachers to stimulate critical thinking. As teachers establish a rapport with students, they demonstrate appreciation of student contributions while at the same time challenging them to think more deeply and to articulate their ideas more clearly (Brookfield & Preskill, 2005). Moreover, by collaborating with other school personnel or professionals, meaningful discussion groups can be embedded into the continuum of services provided for gifted students. Discussion group materials and size vary according to multiple variables (e.g., number of students, topic or theme, teacher capacity, etc.).

One way to approach implementing discussion groups is to organize them by themes. In Halsted's (2009) book, she identified developmentally appropriate affective themes that teachers and parents can use in facilitating discussions with children and adolescents, such as "perfectionism" or "establishing an identity." Peterson (2012) described other adolescent discussion groups where themes such as self-criticism, anxiety, heightened sensitivity, and others were initiated by gifted students themselves.

Discussion groups can provide an important venue into the internal life of a gifted learner across their school trajectory. They can help students develop expressive language to communicate struggles while learning to appreciate others' views. The group dynamic, if implemented in a trusting and nonjudgmental environment, can generate empathic support and self-examination.

Project Work

Many teachers use project work as a way to cover the content standards in a more hands-on approach. Having students engage in project work, whether it is known as project-based learning or problem-based learning, has academic and affective benefits for students, ranging from project management to self-confidence.

Project work can give teachers the opportunity to build stronger relationships with their students by acting as their hands-on learning facilitator. In essence, project work is an instructional method where students collaborate with others and "learn by doing." The same skills learned through this strategy are also many of the skills sought by employers. The World Economic Forum reported that coordinating with others and cognitive flexibility are two of the most important skills needed by students for the global economy (Schwab, 2018). Project work

affords those skills. Moreover, according to Shaffer (2018), project work has clear affective benefits such as collaboration, self-confidence, and empowerment.

Project work can be done in any content area or across curricular areas, resulting in student gains. In a randomized control study that combined STEM fields with biographies, Robinson et al. (2014) found increased achievement in the content area (science) and process skills among gifted students in the experimental group as compared with control group students. In a review of the literature on increasing early opportunities for advanced learners in elementary classrooms, Dailey et al. (2018) found that classroom activities, special schools, afterschool or summer programs, competitions, and informal learning opportunities focused on STEM curricula all provided authentic and experiential opportunities that stimulated student interests in the content areas and fostered their curiosity through problem-based investigations. Providing engaging experiences for gifted students through project work advances multiple skills, including the 21st-century ones of critical and creative thinking, integrated connected learning, and responsibility for lifelong learning (Centre for Educational Research and Innovation, 2008).

Conclusion

Instruction in core strategies that satisfy the conditions for promoting transfer of learning and for promoting long-term learning is a real benefit to counselors, parents, and gifted learners. The use of acceleration, questioning, models of critical and creative thinking, and metacognition in the cognitive domain contributes to engaging and motivating learning that is beneficial for advanced students. Affective strategies like bibliotherapy, journaling, and discussion groups also contribute to higher level advanced learning and act as protective mechanisms against the onset of anxiety and depression. Preparation in these strategies should be the work of all teacher education institutions as they struggle to raise achievement for K–12 students in schools. Armed with information about effective, appropriate instructional strategies, counselors can encourage teachers to incorporate these into their lessons for gifted students, enhancing their learning and helping to meet their unique needs for challenge and stimulation. Moreover, such strategies should be employed by counselors directly in their interactions with gifted learners and in their efforts to develop appropriate program plans for them.

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CHAPTER 31

Understanding and Addressing Underachievement in Gifted Students

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> "For all sad words of tongue and pen, the saddest are these, 'It might have been.'"
>
> —John Greenleaf Whittier

The underachievement of students identified as gifted and talented is a fairly common concern for parents and teachers. Underachievement is one of the most common reasons that students identified as gifted and talented may require a counselor's attention. In fact, counselors in centers designed to serve gifted students report that underachievement is among the most common issues they address (Colangelo, 2003). However, few counselors receive explicit training on the topic of underachievement within high-ability populations. Despite this limited exposure, counselors often must assist teachers and parents with gifted and talented students who are not achieving at expected levels (Peterson, 2006).

Underachievement affects a variety of students from low, medium, and high socioeconomic groups and from rural, suburban, and urban areas. It also transcends racial and ethnic barriers (Cavilla, 2017; Ferrer-Wreder et al., 2014; Matthews & McBee, 2007; Reis et al., 2005; Zabloski & Milacci, 2012). Underachievement can begin as early as elementary school and influences middle and high school, college, and career success, often becoming a persistent and/or grow-

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ing problem (Almukhambetova & Hernández-Torrano, 2020; Barbier et al., 2019; McCall et al., 1992; Peterson & Colangelo, 1996; Snyder et al., 2019).

Estimates of the extent of underachievement among gifted students ranges from around 10% (Colangelo et al., 2004; Phillipson, 2008) to as high as 50% (Richert, 1991). Many underachieving gifted students may go unrecognized as either gifted and/or as underachieving. Therefore, accurately assessing the prevalence of underachievement within gifted and talented students is virtually impossible.

Underachievement is generally conceptualized as a discrepancy between expected performance (potential) and actual performance (achievement). Most research on gifted underachievement published in the last 20 years cites a definition for gifted underachievement proposed by Reis and McCoach (2000):

> Underachievers are students who exhibit a severe discrepancy between expected achievement (as measured by standardized achievement test scores or cognitive or intellectual ability assessments) and actual achievement (as measured by class grades and teacher evaluations). To be classified as an underachiever, the discrepancy between expected and actual achievement must not be the direct result of a diagnosed learning disability and must persist over an extended period of time. (p. 157)

However, controversy surrounds the criteria used to measure potential and performance, the degree of discrepancy, and the length of time the discrepancy persists (McCoach & Siegle, 2014; McCoach et al., 2020; Reis & McCoach, 2000; Steenbergen-Hu et al., 2020).

One component of this definition is that the discrepancy between expected and actual achievement must occur over an extended period of time. Even successful gifted students may experience uneven academic performance from time to time in high school. The difference between achievers and underachievers is that achievers have established habits of achievement that can withstand brief periods of academic unevenness (Peterson & Colangelo, 1996). Peterson (2001) cautioned educators not to "make judgments about future prospects for underachievers based on only one stage of development or during a time of significant personal or family transition" (p. 246). The students who should be of greatest concern to counselors and teachers are those who are failing to achieve in any productive area over an extended time. However, changing behaviors is easiest before habits become completely entrenched. Therefore, counselors may wish to monitor and intervene with students before they meet the criteria for underachievement.

What level of achievement should parents, teachers, and counselors expect from gifted and talented students? It is certainly unreasonable to expect any student to achieve at the highest levels in every area. Each student possesses a unique spectrum of talents. Therefore, even highly gifted students may perform at average levels in an area of relative weakness. Additionally, gifted students may choose to not exert effort in areas that are not important to them, instead choosing to concentrate their efforts in areas they enjoy and value. Certain scholars (e.g., Delisle & Galbraith, 2002; Hébert, 2020) argue that these selective-achieving students, who harness their energies into select academic or nonacademic areas should not be labeled underachievers:

> Labeling a student an underachiever requires making a value judgment about the worthiness of certain accomplishments. A teacher may believe that reading Huck Finn is more worthwhile than mastering a new video game, but a child may not. This behavior illustrates a values conflict between adult and child (Whitmore, 1986). At what age should an individual gain control over his or her own destiny and make decisions regarding his or her priorities and goals? Finally, should adults place higher expectations on gifted students or does this represent an elitist and utilitarian view of humanity? (Reis & McCoach, 2000, p. 156)

The Reis and McCoach (2000) definition also specifies that lower-than-expected achievement cannot be the result of an undiagnosed learning issue. Students with learning disabilities often score higher on tests of cognitive ability (such as IQ tests) than on standardized achievement tests. Because IQ tests require no reading and standardized achievement tests require considerable amounts of reading, this is particularly true for students with reading disabilities. Thus, students with high ability and low standardized achievement test scores may be underachievers, or they may have undiagnosed learning disabilities. Therefore, Moon and Hall (1998) recommended that gifted students with low standardized achievement test scores should be screened for learning disabilities prior to treating these students as underachievers.

Counselors play an important role in identifying and assisting gifted underachievers. Because counselors have ready access to student files, they may be able to identify early clues to the difficulties gifted students are experiencing. Information about behaviors, achievement, course selection, and attendance may help identify students early enough that prevention, rather than remediation, of underachievement is possible. For example, gifted underachievers miss more school, are more often tardy, and select fewer demanding electives than gifted achievers (Peterson

& Colangelo, 1996). By high school, teachers may be unaware that chronically underachieving students were ever considered "gifted." Long-term academic underachievers may develop academic deficits and show no signs of intellectual promise in the classroom. Counselors who identify such students may be able to work with the teachers, parents, and students to tap into students' strengths and interests. They may also be able to provide individual and/or group counseling. Such individual attention has the potential to help gifted underachievers become more successful students.

Characteristics of and Influences on Gifted Underachievers

Although underachievers are a heterogeneous population (Heacox, 1991; Mandel & Marcus, 1988; Rimm, 2008; Siegle, 2013; Siegle & McCoach, 2005), some factors commonly associated with underachievement include:

- low academic self-perceptions (Freedman, 2000; Matthews & McBee, 2007),
- low self-efficacy (Siegle & McCoach, 2005),
- low self-motivation and low effort toward academic tasks (Baslanti & McCoach, 2006; Matthews & McBee, 2007; McCoach & Siegle, 2003),
- external attributions (Carr et al., 1991),
- low goal valuation (Freedman, 2000; Matthews & McBee, 2007; McCall et al., 2000; McCoach & Siegle, 2003),
- negative attitudes toward school and teachers (Ford, 2011; McCoach & Siegle, 2003; Rimm, 2008), and
- low self-regulatory or metacognitive skills (Carr et al., 1991).

Because underachievers are such a diverse group, such lists are only moderately helpful. Underachievers may exhibit deficits in one or any combination of the characteristics listed, or they may not exhibit deficits in any of these areas. The variability of motivational and attitudinal measures within samples of gifted underachievers tends to be higher than the variability for comparison groups of gifted achievers (McCoach & Siegle, 2003). Although underachievers may share some characteristics, they are not a homogeneous population: This is one reason reversing student underachievement is such a complex issue. Several researchers and practitioners have proposed specific subtypes of underachievers (Heacox, 1991; Mandel & Marcus, 1988; Rimm, 2008; Siegle, 2013; Siegle & McCoach, 2005; Snyder & Linnenbrink-Garcia, 2013), each of which might require a different intervention strategy. In addition to the individual characteristics listed pre-

viously, context (e.g., gender, peer group, family dynamics, socioeconomic status, and cultural environment) also influences the development and manifestation of underachievement.

Gender

Multiple studies have reported that gifted males underachieve at 2–3 times the rate of gifted females (Matthews & McBee, 2007; McCoach, 2002; McCoach et al., 2020; Mofield & Parker Peters, 2019; Ritchotte et al., 2015; Rubenstein et al., 2012). Gifted males tend to outperform gifted females on off-level mathematics and science subtests, and gifted females outperform gifted males on verbal subtests (Olszewski-Kubilius & Lee, 2011). However, females tend to have higher high school GPAs in all subjects compared to their male counterparts (Cole, 1997), and they enroll in more advanced coursework during secondary school (Shewach et al., 2019). Moreover, male underachievement seems to transcend secondary school. Females enter and graduate from college in greater numbers and with higher GPAs, take more advanced coursework in college (except in the areas of mathematics and science; Shewach et al., 2019), and earn more advanced degrees (Conger & Long, 2010; Okahana & Zhou, 2018) than males do.

However, females underachieve, too (Desmet et al., 2020; Petersen, 2013; Reis, 1998). Because females display the types of behaviors that are rewarded in classrooms and their underachievement starts later than boys' (Peterson & Colangelo, 1996), their underachievement may be overlooked. Peterson and Colangelo (1996) found that female underachievers generally began to underachieve during grades 8 and 9, whereas male underachievers began to underachieve during grade 7. Additionally, young females cannot be considered gifted underachievers if they are not first identified as gifted. A meta-analysis conducted by Petersen (2013) indicated that boys were more likely than girls to be identified as gifted. In another study (Bianco et al., 2011), teachers provided very different qualitative responses to identical profiles of students of different genders. For the female student profile, a teacher wrote:

> I only disagreed [with referring] because it seems this young girl is intelligent, creative, and a good critical thinker, however not necessarily a genius! I believe that she would succeed if placed there, but if she were to constantly be told that she is "gifted" it might intensify her already domineering and arrogant personality. (Bianco et al., 2011, p. 175)

For the male student with the same profile, one teacher noted the student would thrive in the gifted program because he was "self-directed and motivated" (p. 176). Another teacher suggested that his behavior was consistent with "highly recognized artistic individuals" (p. 176). Counselors should also be aware that dominant, achievement-oriented females often receive implicit or explicit messages that discourage achievement orientation and strong personality characteristics in females. Such messages may cause high-ability females to hide their abilities and talents. Counselors should therefore attend to bright females who may be doing average work and not drawing attention to themselves.

Peers

Peers can positively or negatively affect students' achievement. Students have more positive feelings toward school and their classes when their peers value, support, and encourage their learning (Fredricks et al., 2010). Reis et al. (1995) noted that high-achieving peers had a positive influence on students who were beginning to underachieve. Shin and Ryan (2014) found that students selected friends based on similar levels of academic self-efficacy and achievement, and over time, students became more like their friends in all aspects, except for self-efficacy.

However, peers can also have a negative effect. Clasen and Clasen (1995) noted that 66% of high-achieving students reported that peer pressure, and the attitude of other students, including friends, was a primary force in not getting good grades. Students' grades are often more closely related to their friends' grades at the end of the school year than at the beginning, and students' grades often decreased from fall to spring if their friends had lower grades in the fall (Berndt, 1999). Although peer achievement levels do relate to students' academic achievement, it is unclear whether the choice to associate with other nonachievers is a cause or a result of gifted students' underachievement.

Peer relationships are further influenced by a larger cultural context. For instance, some gifted African American students have voiced concerns that peers may perceive academic achievement as evidence of cultural abandonment. When asked for an explanation why a smart student was not academically performing, the majority of African American students said it was because the student wanted to be accepted by their peers (Ford et al., 2008). Thus, peer relationships appear to have a great deal of influence on students' achievement, especially in adolescence. In addition, Black gifted students "must navigate gifted programs that are not structured to support and affirm their various identities" (Sewell & Goings, 2020, p. 112).

Family Dynamics

Because of the complexity of underachievement and the lack of homogeneity among students, there is limited empirical research on the family characteristics of underachieving gifted children. However, certain types of home environments may be related to the development of students' achievement and underachievement patterns. For example:

> (a) extreme amounts of early attention may confer too early adult status and attention dependence, (b) consistency between parents is more critical than any particular style of parenting, (c) independence for home-work completion is characteristic of achievers, (d) parent interest in and satisfaction with personal careers and intrinsic learning must be specifically communicated to children in order to provide appropriate achieving role models, and (e) reasonable standards of family organization appear important for achievement. (Rimm & Lowe, 1988, p. 353)

Students are more likely to achieve in school when they have a supportive academic home climate that dovetails with the academic school climate. Garn et al. (2010) found that about half of the parents of gifted children they interviewed viewed themselves as having a better grasp on their children's needs than their children's teachers. Parents' perceptions of how they felt their children valued schoolwork and how they believed their children viewed support in the school environment are more closely correlated with their students' perceptions than are teachers' perceptions (Siegle et al., 2020). Therefore, counselors should engage parents as they work to understand the motivational patterns of underachieving gifted students. Parents can provide additional insight into factors affecting student motivation. Counselors can use parents' perspectives as they work with students and teachers to understand student motivation and help students appreciate the value of academic achievement. In addition to sharing the extent to which they see their children valuing school, parents can also share their children's interests, aspirations, and identities (Siegle et al., 2020, p. 13).

Counselors also play a key role in facilitating discussions between parents and teachers. Counselors can provide parents with important information regarding how to foster positive beliefs, attitudes, and motivation in the home. It is always essential for parents, counselors, and educators to work together to promote student achievement and success. When gifted students underachieve, parents and teachers may view the issue very differently. Counselors can act as mediators when parents and teachers disagree about how to handle underachieving students.

Finally, counselors can help underachievers and their parents understand teachers' perspectives and the reasons that teachers set certain expectations and react with certain consequences when those expectations are not met.

Poverty and Underserved Populations

Underachievement can occur when gifted students do not receive the support and educational services required to develop their talents. Students who are not provided adequate opportunities or resources to develop their talents often become involuntary underachievers. Poverty at the student, school, and district levels can negatively influence student academic opportunities and outcomes (Hamilton et al., 2018; Kettler et al., 2015). Students from families in poverty or underserved groups are particularly vulnerable. Forty-four percent of students from lower income backgrounds who perform in the top 10% on achievement tests when they enter first grade will not score in the top 10% when they reach fifth grade (Wyner et al., 2007). Gifted students from higher income homes may progress more quickly through academic content than their gifted peers from lower income homes. High-achieving students from lower income homes drop out of high school or do not graduate on time at rates twice that of their peers from higher income homes (Wyner et al., 2007).

Culturally diverse students face unique barriers to their achievement (Siegle et al., 2016) and are often underrepresented in gifted programs (Siegle, 2020) and overrepresented in special education (Ladner & Hammons, 2001). Culturally diverse students continue to face unintentional bias at school and in society at large (Ford, 2011). According to Stambaugh and Ford (2015), "When gifted programs are composed predominantly of highly affluent White students, it is more difficult for students of different cultures or of poverty to feel accepted in the gifted classroom, and retention is difficult" (p. 197). Further, the definition of achievement within a particular subculture may vary significantly from that of the dominant culture. Counselors can "help culturally different gifted students become bicultural," providing students with the skills to survive in both cultures, to communicate their ideas in both cultures, to display situational and culturally appropriate behaviors, and to maintain positive attitudes about both groups (Stambaugh & Ford, 2015, p. 198).

Attention Deficit/Hyperactivity Disorder

In a recently published study, gifted underachievers exhibited elevated rates of inattention in both home and school environments; however, they did not

exhibit higher rates of hyperactivity (McCoach et al., 2020, p. 112). Teachers reported higher inattention at school than parents observed at home, but the prevalence of elevated inattention was much higher for gifted underachievers than it was in the norming sample. The prevalence of inattention was more than 2 times as high as the prevalence in the norming sample using the teacher rating scales and more than 5 times as high as the prevalence in the norming sample using the parent rating scales. Students with elevated parent ratings of inattention had lower self-regulation, goal valuation, and self-efficacy. Self-regulation was most strongly related to inattention. Each of these factors is associated with underachievement (Siegle et al., 2017). Given the high number of underachievers who exhibited inattentive behaviors, counselors should consider screening for ADHD more frequently when gifted students are underachieving in schools, especially when parents also report inattention at home.

Pathways to Underachievement

Snyder et al. (2019) suggested that underachievement for gifted students follows two possible pathways: the Maladaptive Competence Beliefs Pathway and the Declining Value Beliefs Pathway. How students react to being identified as gifted and the challenge, or the lack of challenge, they encounter early in their school career set many students on one or the other of the two pathways to underachievement. Both pathways become problematic when academic challenge increases.

Students on the Maladaptive Competence Beliefs Pathway develop an unhealthy identity based on their gifted label and the ease with which they achieve (Snyder et al., 2019). Their identity is tied to being gifted and not having to work hard to achieve. As curriculum becomes challenging, they self-handicap and disengage to protect their gifted identity. Many academically gifted adolescents view the stability of intelligence and giftedness differently (Makel et al., 2015). They see intelligence as malleable and giftedness as fixed. When these students have a fixed mindset (Dweck, 2000), they are particularly susceptible to underachievement (Siegle, 2013). Gifted students with a fixed mindset:

> may be reluctant to risk their "giftedness," which they see as set, by performing poorly in competitive and challenging situations. For these students, not performing is less risky than performing and failing. For them, every difficult task is a test of their giftedness, and many become underachievers because they are simply not willing to take that risk. For some, this means not

> completing the assignment. For others, it means procrastinating and then hiding behind statements such as, "I could have done better if I had more time." (Siegle, 2018, pp. 289–290)

Rosário et al. (2009) also found a strong relationship between procrastination and underachievement. Counselors can work with students, parents, and teachers to ensure each fully understands that a gifted label does ensure effortless learning and assured successes.

For students on the Declining Value Beliefs Pathway, the gifted label is not maladaptive (Snyder et al., 2019). The low value beliefs within this pathway emerge as a result of insufficient challenge. Curricula heavy with tedious "busy-work" that many gifted students encounter results in lower perceived value for academic work (Snyder & Linnenbrink-Garcia, 2013, p. 216):

> Overall, as a student in this pathway repeatedly encounters unchallenging work, the likelihood that the student will form a connection between hard work and enjoyment or personal meaning diminishes. (Snyder & Linnenbrink-Garcia, 2013, p. 217)

By failing to develop the important connection between effort and positive outcomes (Rimm, 2008), students set themselves up for disengagement and underachievement.

Supporting High Achievement

Most efforts to reverse underachievement involve a combination of counseling and curricular modifications. Although there is limited evidence that interventions improve student achievement, many interventions have been shown to improve underachievers' self-efficacy, goal valuation, environment perceptions, self-regulation/motivation, and psychosocial functioning (Steenbergen-Hu et al., 2020).

Rimm's Tri-Focal Model

Sylvia Rimm has spent her career counseling gifted underachievers and reversing their underachievement. The Tri-Focal Model (Rimm, 2008), which has been successful in about 80% of the clinic cases that use it (Rimm, 2003), is based on Rimm's clinical work with underachievers. Rimm's model consists of six steps:

1. assessment of skills, abilities, reinforcement contingencies, and types of underachievement;
2. communication;
3. changing the expectations of important others;
4. role model identification;
5. correcting skill deficiencies; and
6. modifications of reinforcements at home and school. (Davis et al., 2011, p. 315)

The assessment can be conducted by a school psychologist or counselor. It usually involves an individual IQ test, individual achievement tests to assess the student's strengths and deficits in basic skills, creativity assessments, and parent and student interviews. This information is communicated to parents and teachers to help them understand the student's abilities and achievements as well as any dependence or dominance issue that they may be reinforcing. The data are also useful in changing the student's and others' expectations. In the case of the student, this conversation may address self-efficacy issues. Teachers may be encouraged to make instructional and curricular modifications that make school more meaningful for the student. Additionally, students may begin to perceive that teachers do want them to succeed. This communication also addresses parental expectations for the student, which may influence the student's perceptions of environmental support.

Identification of a role model can help students reverse academic underachievement. Hébert (2020) reported, "the overarching finding in [his] research was the powerful influence of a significant adult" (p. 320). Rimm concurred when she wrote, "All other treatments for underachievement dim in importance compared with strong identification with an achieving model" (Davis et al., 2011, p. 318). Many underachieving students do not have an achieving role model in their lives. It is essential for role models (e.g., relatives, coaches, teachers, older students, youth group leaders) to be introduced in these students' lives. Such role models expose students to the connection between doing hard work and enjoying meaningful accomplishments as the result of it.

Students with a pattern of underachievement usually have skill deficiencies as a result of inattention in class and poor work habits. Fortunately, because they are gifted, these deficits can usually be overcome with tutoring:

> The correction of skill deficiencies must be conducted carefully so that (1) the independent work of the underachieving child is reinforced by the tutor, (2) manipulation of the tutor by the child is avoided, and (3) the child senses the relation-

> ship between effort and the achievement outcomes. (Davis et al., 2011, p. 319)

Finally, counselors, parents, and teachers can collaborate on long-term goals and short-term objectives that guarantee immediate small successes for the student at home and school. These success experiences may be reinforced by rewards that are as small as possible yet are meaningful for the student.

Renzulli and Reis's Schoolwide Enrichment Model

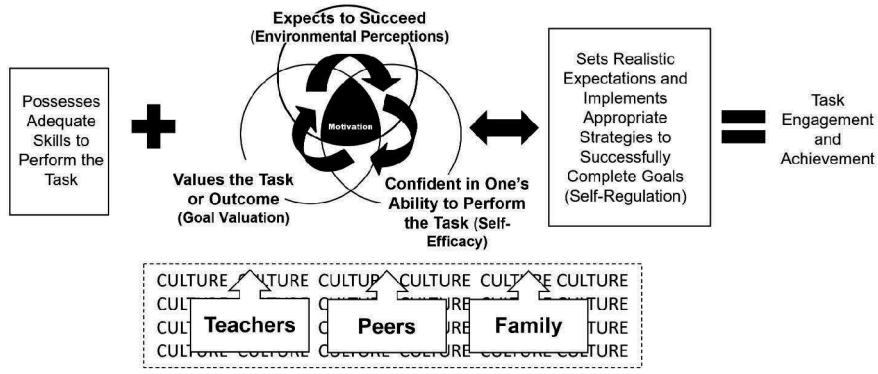
The link between having an interest in an area and achieving in that area cannot be overemphasized. Students who reported being interested in a subject tended to do well in that subject; those with lower interest reported lower achievement (Siegle et al., 2010). Incorporating students' interests helps promote intellectually stimulating learning environments:

> Cognitively complex tasks that are both meaningful and challenging and allow youth to pose and solve real-world problems can help . . . [increase students' passion for learning]. Providing opportunities for students to incorporate their outside interests and future plans in their schoolwork is also likely to be beneficial. Finally, teachers should give youth some choice over the types of activities they work on and some control over how they complete these activities. (Fredricks et al., 2010, p. 27)

These suggestions mirror the Type III activities found in the Schoolwide Enrichment Model (SEM; Renzulli & Reis, 2014). Type III investigations are a component of the Schoolwide Enrichment Model and the Enrichment Triad Model (Renzulli & Reis, 2014) and are often the result of an interest sparked through the student's participation in a general exploratory activity (Type I Enrichment) and involve training in cognitive and affective skills (Type II Enrichment). Type III Enrichment activities are academic investigations that focus on (a) student interest, (b) the use of authentic investigative and creative methodology, (c) problems without predetermined correct answers, and (d) development of a real product that has impact on one or more intended audiences (Renzulli & Reis, 2014).

Research conducted on students who engaged in Type III Enrichment suggests a relationship between students' early and subsequent interests (Westberg, 2010), postsecondary school plans (Hébert, 1993), career choices (Delcourt, 1994; Starko, 1988), goal valuation (Brigandi et al., 2016), levels of self-efficacy (Starko, 1988), and ability to self-regulate (Hébert, 1993). Type III SEM activi-

Figure 31.1 *Achievement Orientation Model*



Note. Reprinted with permission of Del Siegle.

ties have been used to successfully reverse underachievement in middle school students (Baum et al., 1995). Similarly, a plan of strength and interest-based strategies with mentors has also been shown to improve student engagement (Hébert & Olenchak, 2000).

Siegle and McCoach's Achievement Orientation Model

The beliefs and attitudes students hold toward themselves, given tasks, and achievement itself can influence what tasks students seek and whether they are able to obtain them. Individuals' self-perceptions in three areas (self-efficacy [confidence], goal valuation [meaningfulness], and environmental perceptions [perceived support]) regulate students' engagement, and subsequently, their self-regulation and motivation to achieve. Societal and cultural values influence students' attitudes in the three areas of self-efficacy, goal valuation, and environmental perceptions through students' interactions with peers, parents, and teachers. These are the components of the Achievement Orientation Model (see Figure 31.1; Siegle & McCoach, 2005; Siegle et al., 2017), which is currently the most prominent model addressing the underachievement of gifted students (Steenbergen-Hu et al., 2020).

Self-Efficacy. Students must believe they have the skills to perform a task before they will attempt it. Generally, gifted students have high academic self-efficacy, and they do not attribute their academic failures to lack of ability (Assouline et al., 2006). Although it is imperative that children recognize their skills and understand they can do well if they attempt tasks, they must also recognize their own role in developing their talents, which will encourage them to

attempt challenging tasks. In addition, they should believe that the skills they have are malleable and that through effort they can improve and develop them further (Dweck & Molden, 2005). Gifted students are especially at risk of believing their abilities are innate and not developed because, in many cases, they have been told for years that they have great ability. They may thus assume that giftedness is a nonmalleable trait, particularly if others in their lives have not meaningfully discussed their giftedness with them.

Counselors can help build student confidence and appreciation for effort by doing the following:

- Talk with students about their giftedness. Share performance information and test data. Help students recognize that they have ability, but to develop potential into meaningful contributions requires sustained effort.
- Document student growth through performance portfolios, which may include videos. Students can periodically review these to monitor their improvements.
- Help gifted students understand that challenging situations are opportunities for growth and that encountering difficulty does not indicate a lack of smartness.
- Help students recognize the role effort played in their growth by complimenting them with specific examples. These compliments should mention a specifically developed skill and attribute that skill to the child's active involvement.

Goal Valuation. Students must also value school tasks. Even if students believe they have the skills (self-efficacy) to do mathematics, if they do not see their mathematics work as meaningful, they will not complete it. Many gifted students do not view their schoolwork as meaningful for several reasons. They may already know much of what is presented to them or not find it intellectually stimulating (Davis et al., 2011; Reis et al., 1998). Generally, gifted students enjoy learning and do not want to be bored in school. They often equate lack of challenge with boredom (Gallagher et al., 1997). It is important to carefully listen to gifted underachievers' explanations for what makes school and tasks meaningful to them and pay attention to students' interests.

There are several ways counselors can help students both recognize and add value to school, including the following:

- Support students in setting short-, medium-, and long-term academic goals. Small, short-term goals that can be accomplished in a day or week work better for younger students. It is essential that the goals are meaningful to the students themselves.

- Encourage students to think seriously about how their performance in their present classes can affect their future goals and to explicitly articulate their reasons for choosing or failing to put forth effort in a class.
- Explicitly discuss why classroom content is important, when students will need this knowledge, and what future options will require that they have mastered this material. This discussion, in turn, can lead to an analysis of the roadblocks generated when one has not created a foundation for future achievement (Kaplan, 2006). For instance, making salient the future utility of a school assignment can increase students' motivation and self-regulation. Counselors should be aware, however, that distal goals may not motivate all students.
- Integrate students' interests into classroom instruction and curriculum.

Environmental Perception. Students' perceptions of school events, teachers' expectations of students, and the patterns of interaction between students and teachers all affect students' academic attitudes and behaviors. These perceptions influence students' educational decisions. Students must believe that those around them want to see them succeed. They must feel their efforts are appreciated and supported. Phrases such as "My teachers do not like me" or "I cannot learn with the way he teaches" may be signs that students do not view their environment as supportive or that they have developed a belief that their efforts do not affect outcomes. Students may believe they have the ability to perform well on a particular school topic (self-efficacy), and they may even believe that the topic is important to learn (goal valuation), but if (for any reason) they do not believe that they will be successful if they attempt the task (i.e., that the cost of their efforts is not worth the outcome), then they will not engage and be productive.

Counselors have an opportunity to address environmental perceptions by using the following strategies:

- Discuss with students their perceived obstacles and the options that exist for them. This includes discussing what the students can and cannot control. Teaching students to appreciate multiple viewpoints and to analyze appropriate courses of action should be part of the discussion.
- Do not allow students to use their environment as an excuse. When this occurs, a counseling technique such as active listening may help resolve students' concerns.
- Help students recognize and analyze their automatic thoughts so that they can replace distorted or negative cognitions with more realistic and non-negative appraisals, focusing on personal responsibility and choice.

Students with positive attitudes in these three areas (self-efficacy, task value, and environmental perceptions) set realistic goals and self-regulate to accomplish their tasks. When any one of these three attitudes is negative, students may fail to self-regulate, leading to decreased achievement. However, when these beliefs are present and students successfully self-regulate, their self-efficacy increases, they value the task more, and they are more trusting of their environment (Brigandi, 2015). Students will not self-regulate without positive beliefs about self-efficacy, goal valuation, and environmental perceptions. Interestingly, successful self-regulation can reinforce these essential beliefs.

Concluding Thoughts

Much is known about reversing underachievement, but it is rarely easy because children, circumstances, families, and classroom environments are all complex and differ significantly (Rimm, 2008; Rimm & Lowe, 1988). Peterson (2001) found that successful adults who reversed their underachievement did so because of "developmental progress, mentors who represented achievement, assertive temperaments, developed strengths, movement away from toxic family and school systems, and complex interactions among all of these" (p. 247).

As frustrating as underachievement is to parents, teachers, and counselors, it is impossible to reverse underachievement unless the students are willing to try to change their pattern of behaviors. As Whitmore (1986) noted, "The final choice, obviously, is the child's; he or she must want to change and believe effort will be rewarded by sufficient success and personal satisfaction" (p. 69). For some gifted students, this willingness to change comes with maturity. For others, the impetus to change occurs when the consequences of underachievement become more serious. Still others engage when they are provided with a more intellectually stimulating learning environment. Unfortunately, some underachievers never reverse course.

Supporting achievement requires effort but is an important role that every adult associated with a young person must seriously embrace. Ultimately, however, it is the underachiever who holds the key to unlocking their true academic potential.

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CHAPTER 32

Supporting Career Development of Gifted Students

MIHYEON KIM

Career planning is a complex process associated with different stages of life and career aspirations for every student, including gifted students. Many parents and teachers might be concerned about academic planning for gifted and talented young people, but career planning for gifted students is often underestimated because of their academic success. For underachieving students, concerns often focus on academic achievement improvement without aligning academics with career-related goals. Parents, teachers, and counselors may assume that career planning will take care of itself if students achieve academic success in schools. However, many gifted students experience difficulties in deciding on a career path after secondary education and, as a result, may change their majors while they are enrolled at a postsecondary educational institution (Simpson & Kaufmann, 1981). The issue of career planning for gifted students is demonstrated in the case of Jessica.

Jessica is a brilliant girl. At school, she was a straight-A student, and her parents never worried about her future because of her maturity and academic success. Even though her parents wanted her to be a doctor, they never insisted that she study medicine. However, Jessica decided to go to medical school because she knew her parents' hopes, and her career aspirations were never focused on any specific area. Eventually, she went to the Johns Hopkins University School of Medicine on a full scholarship. Before she went to college, she was a wonder-

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ful daughter, and her parents were very proud of her. While she was in medical school, she became confused about her career. She struggled for 2 years thinking through her career choice and was not able to keep up with her coursework. Through that process she became overly stressed, requiring the support of a psychologist and medication. Changing career paths caused her to spend more time in college than she had anticipated, and she remained uncertain about her decision to change her career path from medicine to business.

Why is it that this bright and gifted student set out on the wrong career path and wasted so much of her valuable time and energy in college? Jessica's case is not unique. During adolescence, many gifted students become confused and waste their time and emotions, wandering aimlessly instead of pursuing a career path that would be best for them. Many career development theories provide a foundation from which to understand the developmental process that students undergo. In general, these theories focus on career interests and vocational behaviors in order to provide proper career guidance. This chapter will explore several career development theories from a developmental and a social cognitive perspective, and will apply these to career counseling with gifted students.

Career Development Theories

Super's Vocational Development Theory

Super (1957) proposed that self-concept is a critical component of vocational development. He believed that vocational self-concept, which he defined as a "picture of the self in some role, situation, or position, performing some set of functions, or in some web of relationships" (Super, 1963, p. 18), is formed by interaction between the person and the environment. He identified five stages of vocational development, as follows:

- In the growth period (ages 0–14), children try out different experiences and develop an insight and knowledge about work.
- In the exploration period (ages 14–24), individuals explore different possible career choices and become aware of their interests and abilities. Individuals develop their vocational goals based on interests and abilities, and prepare to acquire necessary skills as well as experiences for employment.
- In the establishment period (ages 25–44), individuals become competent in a career and in advancing it.

- In the maintenance period (ages 45–65), individuals continue to advance their skills and knowledge in order to be productive while preparing for retirement.
- In the decline period (ages 65+), individuals adjust their work based on their physical capabilities and try to deal with resources in order to remain independent.

Super believed that the roles individuals play change over the course of different life stages and that people have particular decision points over the course of their life span that reflect situational and personal determinants. Situational determinants are related to geographic, historic, social, and economic conditions. Personal determinants are related to the inherent foundation of the individual, such as home and the community. When people take on a new role or make significant changes to their existing role, they encounter decision points, such as the decision to enter college (Super, 1980). Super attempted to portray lifelong occupational development by way of various roles, decision points, decision processes, and decision determinants within an individual's life stages.

Gottfredson's Theory

Gottfredson (1999) described the process of career development as an individual's vocational interests in relation to the correlations and interactions that exist between genetics and environment. A correlation between genetics and environment refers to the idea that different inherited characteristics tend to be correlated with different environments, such as social support or trauma. Moreover, the same environment may influence individuals differently, depending upon their inherited characteristics. For example, a child with musically gifted parents has a greater possibility of having musical talent and living in a musically encouraging environment. Additionally, the same levels of stress can affect individuals differently. In some people, stress might cause depression, while others might be able to easily handle the same level of stress without getting depressed.

Through his interest in genetics and environment, Gottfredson (1996) viewed the career development process from a developmental and sociological perspective, introduced the processes of circumscription and compromise, and examined how they impacted an individual's ability to make career decisions. *Circumscription* is the process of creating a zone of acceptable alternatives that are linked to societal norms. *Compromise* is the process of adjusting career choices based on limiting factors, such as job availability, prestige, and interests. Therefore, individuals make good choices, rather than the best choices, when they make career choices based upon external reality. Gottfredson (1996) believed that people choose a career

path that first fits with what they believe to be a profession that is appropriate for their sex. The prestige associated with that career is a secondary consideration. Therefore, individuals more willingly sacrifice their interests rather than their sex roles or their potential career prestige.

Gottfredson (1996) described the four developmental stages of the circumscription process used to narrow down career choices as follows:

- Stage 1 (ages 3–5): At this stage, children recognize people by size and orient themselves to those sizes. Therefore, the choice of career involves size and power.
- Stage 2 (ages 6–8): In this stage, children become oriented to sex roles and consider sex role stereotypes as acceptable behaviors. As a result, their career aspirations are focused on those that are deemed appropriate for their sex, and they rule out careers that do not appear to meet this criterion.
- Stage 3 (ages 9–13): During this stage, children begin to incorporate social status and personal abilities and apply these to their career aspirations. They begin to rule out occupations that are not in line with their abilities and social status, and they try to find a career choice that fits within the constraints of their abilities and social class.
- Stage 4 (ages 14 and older): From this stage, circumscription fades and compromise emerges. Adolescents become aware of their internal goals and their self-concept, and the career choices become significantly narrowed. Career choices are weighed against potential opportunities and the obstacles surrounding those opportunities. They now consider reality-based factors, such as familial obligations, the job market, racial and sexual discrimination, and prerequisite training when making their career choices.

Krumboltz's Learning Theory of Career Counseling

Krumboltz's theory attempts to identify the factors that influence career choice based on Bandura's (1986) theory of social learning. Krumboltz (1996) introduced the factors that influence career choice and emphasized that each individual's unique learning experience has an impact on their recognition of themselves, the skills they develop to cope with the environment, and career-entry behaviors.

According to Krumboltz's (1996) theory, the following four influencing factors impact career development and career choices:

- Genetic endowment and special abilities, such as the inherited qualities of physical appearance, intelligence, and talents in specific areas, contribute to set a particular career path for an individual.

- Environmental conditions and events, which are beyond an individual's control, such as governmental policies, play an important role for individuals to choose a specific career path.
- Learning/associative learning experiences and activities contribute to the development of vocational interests during an individual's career planning process. Furthermore, an associative learning experience, involving positive or negative reactions in a neutral situation, influences an individual's perception of a specific occupation. For example, if a student hears that "doctors make a lot of money" or meets with a professional who provides a positive experience, that student will form a positive perception about those occupations.
- Task approach skills, such as problem-solving skills, work habits, mental sets, emotional responses, and cognitive responses, all play a part in determining the outcome of confronted tasks or problems as they relate to career choices.

Holland's Vocational Choice Theory

Holland (1996) believed that people choose to work based on their personality types and vocational environment where their personality type can fit in and where they can use their skills and abilities. Also, people want to work where they can express attitudes and values. For example, socially oriented people prefer to work in an environment with others. Holland's (1992) theory has four basic assumptions, as follows:

1. Most people can be categorized as one of six types: realistic, investigative, artistic, social, enterprising, or conventional (p. 2).
2. There are six kinds of environments: realistic, investigative, artistic, social, enterprising, or conventional (p. 3).
3. People search for environments that will let them exercise their skills and abilities, express their attitudes and values, and take on agreeable problems and roles (p. 4).
4. A person's behavior is determined by an interaction between their personality and the characteristics needed for their environment (p. 4).

Holland proposed that a realistic person prefers to work with concrete and practical activities, such as using machines, tools, and materials. An artistic person prefers to work in an environment related to creative effort. An investigative person prefers to work in an environment with analytical or intellectual activity. A social person prefers to work in an environment involved in working with others. An enterprising person prefers to work in an environment focused on sell-

ing, leading, or manipulating others. A conventional person prefers to work in an environment with predictable organizational demands or specified standards (Holland, 1996). In this theory, accurate occupational knowledge is just as critical as knowledge about students' own personalities so that they can choose a vocation having an environment that brings them individual satisfaction and benefits an employer.

Social Cognitive Career Theory

To comprehend existing career development theories and to build connecting bridges to other theories, Social Cognitive Career Theory (SCCT) addresses the interactive roles of personal, environmental, and behavioral variables in career interest development, career goal development, and the actions required to produce a particular goal (Chronister & McWhirter, 2003). Based on Bandura's (1986) social cognitive theory, Lent et al. (2000) identified four basic elements as influencing factors in a person's choice of career: self-efficacy, outcome expectations, goals, and environmental supports and barriers. Bandura (1986) proposed that people's beliefs about themselves are an important factor in controlling their sense of personal agency within their social system. He defined the perceived self-efficacy as "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (p. 391). In this way, self-efficacy "is concerned not with the skills one has but with judgments of what one can do with whatever skills one possesses" (Bandura, 1986, p. 391). Bandura believed a student's academic achievement is not determined solely by intellectual factors. Knowledge and skills do not necessarily guarantee a student's academic achievement in every situation. Students with high self-efficacy will interact better with teachers by adopting a positive attitude within school environments; in turn, better interactions will lead to better academic achievement in school work. Proponents of the SCCT school of thought applied this theory to making career choices (Lent & Brown, 1996). Lent and Brown (1996) believed that self-efficacy is acquired through the accomplishment of personal performance, vicarious learning, social persuasion, and physiological states and reactions. Outcome expectations are shaped by the consequences of performing particular behaviors that are perceived through direct and vicarious learning experiences; personal goals may be defined as the intention to join in a certain activity and lead to sustained behaviors of individuals. In the career development process, these elements interact with other environmental aspects.

Issues and Needs of Gifted Individuals

Although career development among gifted or high-achieving students is similar in many ways to that of other students, the different characteristics of gifted or high-achieving students are likely to produce different career development issues and career interests (Perrone, 1991). Existing career development theories may be applied to gifted students' career planning by understanding their different needs and issues. This chapter examines the career development issues of gifted students that are most often highlighted in the literature.

Multipotentiality

Researchers in gifted education have pointed out that multipotentiality is one of the unique factors for the career development of gifted students (Robinson et al., 2007; Rysiew et al., 1999). In relation to career choice, multipotentiality is defined as "the interest and ability to succeed in so many vocational areas that choosing one career path becomes problematic" (Delisle & Squires, 1989, p. 98). Multipotentiality may impact gifted students in either a positive or a negative way. Some gifted students may benefit from multipotentiality, using it to obtain a variety of good career choices, while others may suffer from decision-making difficulties that arise from having so many choices to consider (Rysiew et al., 1999). However, as various career-related theories suggest, ability is not the only factor for career development. Other factors, including different life experiences, environmental conditions, and learning experiences that cause internal motivation, may impact students' career decision making (Super, 1957; Gottfredson, 1999; Krumboltz, 1996; Lent et al., 2000).

Although multipotentiality has been introduced as a factor influencing career indecision amongst gifted students, as they have high abilities in various areas and thus struggle to set occupational goals, it is not a definite factor. On the contrary, multipotentiality of gifted students who are capable of pursuing any career path may be beneficial to pursue a career (Sajjadi et al., 2001). Rather than multipotentiality, lack of advising and support for students is what leads to difficulties in choosing their major in college and career paths (Carduner et al, 2011; Kim, 2009). Career counseling advisors or school counselors should provide an appropriate level of resources to support gifted students' career and major decisions, as gifted students need in-depth information and authentic experiences to choose and pursue their career path.

Sensitivity Toward Expectations From Others

In addition to multipotentiality, Kerr (1981) identified societal expectations as an inhibiting factor affecting career choice. Gifted students seem to have heightened sensitivity as a characteristic of the gifted, and the heightened sensitivity contributes to the intensity of emotions and reactions to others (Coleman & Cross, 2005; Mendaglio, 2002). Among many risk factors for academic, social, or emotional problems related to sensitivity of gifted students, environmental factors, such as parents, teachers, peers, and society interacting with sensitivity, can be critical factors that influence gifted students' career choices and goal settings (Gassin et al, 1993; Rysiew et al., 1999; Stake & Mares, 2001; Wigfield et al., 2002). Therefore, overly high or overly low expectations from parents and schools may impact goal setting of gifted students. Kim's (2009) research demonstrated the impact of parental expectation for gifted students' career choice. Thirty-one percent of participating high school students responded that their parents' expectation is one of the most important factors that influenced their future career choice. In the long run, appropriate parental support is essential if students are to make proper career choices. Expectations of parents, teachers, and counselors may influence students' talent and career development in the long run (Lent et al., 2002). However, rather than suggesting specific career paths, parents, teachers, and counselors need to understand individual differences and help students to set proper career goals through providing emotional support, appropriate skills for areas of interest, and discussion opportunities with students (Jung, 2019; Muratori & Smith, 2015; Sampson & Chason, 2008). Discussion within homogeneous groups of students who have similar ability may especially help them to avoid premature career decision making led by adults lacking their own inputs (Chapter 42 by Peterson, this volume). Facilitating various programs based on individual styles and preferences may contribute to the suitable career development of gifted students.

Gifted Female Students

As Reis and Callahan (1989) argued, gifted females are not obtaining eminence status proportionate to the increased number of females in the work force. Moreover, females are less likely to advance in the disciplines of mathematics, science, engineering, and technology. In U.S. colleges and universities, women constitute only 30% of the physical science majors and only 20.2% of the engineering majors who earn doctoral degrees (Snyder et al., 2008). These data support the contention that women are underrepresented in the science and engineering fields, even though their participation has been steadily increasing. Scott

and Mallinckrodt (2005) claimed that the reasons for this gender imbalance in the fields of science and engineering are discouragement of sex-role stereotypes associated with the career, the lack of positive female role models, and low social support. In terms of environmental influences on female students' career development, Grant et al.'s (2000) case study showed that gifted female students who had interests in mathematics and science sometimes changed their career aspirations during high school due to a negative schooling experience and began to suffer from uncertain career aspirations. Grant et al. (2000) also concluded that pressure from parents and societal systems may create a sense of conflict in female students who find themselves caught between personal goals and societal or parental expectations. Consequently, Corrigall and Konrad (2007) found that early gender role attitudes may predict later work hours and earnings. Women who place higher levels of significance on work and work-related roles happened to work longer hours and earned more in their career path than did women who held more traditional attitudes. Therefore, guidance interventions are needed in order for gifted female students to develop better career goals and to acquire the skills they need to make appropriate career-related decisions.

Implications for Career Guidance

As Peterson (see Chapter 42, this volume) suggested, gifted students, regardless of their background and home environment, may seek career guidance due to anxiety about their future. The design of structured programs and counseling to support needs of gifted students on career guidance should address students' needs and characteristics. Career theorists viewed specific needs and characteristics related to careers based on the developmental process. Greene (2005) identified developmental timelines in different school settings. Greene saw elementary school as the stage in which career awareness is introduced, middle school as the stage in which students search for personal identity, and high school as the stage in which students seek independence and begin to make initial career decisions. The proposed career developmental timeline may enable counselors to appropriately guide students in their career planning by matching students' interests with suitable careers.

Career Guidance in Elementary School

As previously mentioned, Super's (1957, 1963) theory noted that students in early childhood are in the process of forming a self-concept. Developmentally, students in elementary school are trying to process and interpret information

about self and others and to understand differences among people, all of which contributes to the development of their self-concept. Moreover, elementary school students begin to recognize sex roles and to incorporate social status and personal abilities in their career aspiration (Gottfredson, 1996). In this stage, providing opportunities to understand students' strengths and limitations may provide a foundation for development of a positive self-concept. Teachers and counselors should help students to find their talents and motivate them to learn more in depth. Recognizing weaknesses and individual differences may also motivate students to improve themselves and to become cooperative with others (Zunker, 1998). Understanding their strengths, weaknesses, and individual differences will contribute to a positive self-concept and career development process. Learning about occupations and being exposed to different types of professionals from diverse populations will help to build an awareness of differences among people and occupations.

In addition to the development of positive self-concept, academic experiences influence students' perceptions of a specific occupation. Gifted students may be sensitive to others' opinions or feelings so that the positive or negative attitudes of teachers and parents in a neutral situation may impact a student's sex role perception or perception of a specific occupation (Gottfredson, 1996; Krumboltz, 1996). Authentic academic experiences with problem-based learning will provide an understanding of the relationship between academic learning and work-related activities.

For students with an extremely focused career interest at a very early age, in-depth knowledge or the skills required for their area of interest should be provided during the process of developing their talent. Identifying resources, including experts who can serve as role models and mentors for students, will have a positive impact on a student's career development process.

Career Guidance in Middle School

Students in middle schools begin to explore different possible career choices based on their interests and abilities. Students begin to develop their career goals and initiate the process to acquire the necessary skills to achieve their career goals (Gottfredson, 1996; Super, 1990). Basic skills are critical for career development as well as for a student's academic success. Organization, time management, test-taking skills, interpersonal skills, decision-making, and prioritization are general skills to be acquired (Wood, 2010).

For gifted students, a knowledge and understanding of their strengths and limitations is very important. Many gifted children may underestimate their strengths and limitations because they are successful in all of their attempts at

academic achievement in school. As Benbow and Lubinski (1996) noted, gifted students may have strong interests in a specific area even though those interests might not be recognized. Guidance counselors need to advise gifted students on setting career goals. Networking will enable students to find mentors in the area of students' talent or interest, will help students enhance their knowledge of a specific field or career choice, and will encourage the acquisition of skills needed for their career development. Providing students with this type of specific information and assistance can help them cope with uncertainties about their choices and may help them focus on their career development.

Furthermore, it is important to understand the relationship among academic requirements, other basic skills, and career choices in the real world. Even though students have interests in a specific area, it is valuable for them to be exposed to a variety of potential occupations. For example, a field trip to experience or observe actual professionals in the workplace allows them to visualize themselves in the workplace context (see Chapter 42 by Peterson, this volume). Wood (2010) suggested that school counselors need to be open to listening to the academic and personal social experiences of gifted students to provide suitable career guidance to individuals based on their different needs.

Career Guidance in High School

Students in high school continue to explore different possible career choices based on their interests and environmental conditions. Students also begin to consider financial security, opportunities, obstacles, family roles, and the advantages and disadvantages of different postsecondary institutions in order to make their career decision (Kim, 2009; Krumboltz, 1996; Lent et al., 1994; Super, 1990). In this stage, refined self-knowledge is important if a student is to make an effective career decision. Additionally, students need more in-depth and detailed information and guidance. Knowledge about postsecondary educational institutions and learning how to evaluate those institutions are also important skills students need as they focus on career decision-making options. Providing career planning along with educational planning and financial information helps students make proper career decisions. Furthermore, students should be introduced to job-related skills, such as resumé preparation and interviewing skills, and a list of employment opportunities. Providing role models and mentors and exposure to real occupational situations may help students make career decisions (Zunker, 1998).

Greene (2002) noted that the combination of a lack of career counseling in high school and students' limited decision-making skills led students to experience emotional difficulty when choosing careers. Greene stressed the importance of

career education and connecting career and life counseling. Programs focusing on an understanding of the career/life planning process; the ability to locate, use, and understand career resource information; and expanded partnerships with various work places will help students develop long-term career goals and provide them with the intensive training they need. Career development theories addressed the importance of providing in-depth information about occupations, postsecondary education, financial aid, jobs, and developmental academic planning based on a student's specific interests. In addition to this information and knowledge, students need to acquire career decision-making skills through their learning experiences. They also need to learn how to narrow down their career interests (Kim, 2009; Leung, 1998). Gifted students may be guided to make appropriate career decisions if they acquire extensive career-related knowledge and skills and gain a deeper understanding for, and an appreciation of, their own talents and interests.

An Example of a Program Enhancing Career Development of Secondary School Students: Focusing on the Future

Focusing on the Future (FOF) is an annual career-related conference for high-achieving middle and high school students and their parents held by the Center for Gifted Education at William & Mary to address students' career planning and to support parents with related information. As Holland's (1996) theory suggests, accuracy of self-knowledge and career information is necessary for career decision making. Using an interest inventory, students learn about their personal styles for their appropriate career choice while they are in the conference. Also, students are introduced to different career paths. Professionals from different disciplines meet students and offer them guidance in their interest areas with accurate information regarding actual work in a career that promotes understanding of their career options and occupational information.

Sessions for parents offer valuable information related to issues of supporting gifted children's academic and career development. The Focusing on the Future program requires that students participate in the conference with their parents or guardians with a belief that effective career development can be made when parents and students work together. Parents attend separate sessions concerning practical issues on college entrance processes, including SAT or ACT preparation, financial preparation for college, and conceptual issues such as understanding gifted students' needs in academics and career preparation and social and emotional issues.

Conclusion

This chapter has provided the foundations of career development theory by which to consider the career development issues of gifted students. By adopting a developmental perspective and recognizing the importance of environmental influences, this chapter examined career guidance for gifted elementary, middle, and high school students. Because students' academic success does not always transfer to career satisfaction and success (Kerr, 1985), organized career planning should be developed based on students' various developmental stages of career aspirations, their individual differences and talents, and the social, cultural, and physical features of their environment. In order to improve students' decision-making skills, teachers, parents, and guidance counselors should recognize the importance of the career planning process from an early age and help students set their career goals as part of the process of academic planning.

Guidance counselors need to enhance the close relationship they have with students. Students should know about themselves and their genuine interest, which is not associated with environmental influences. Counselors need to help students gain knowledge about themselves and provide in-depth information about possible career paths for each individual. For counselors, understanding individual differences, backgrounds, interests, and talents and being knowledgeable about various types of careers are necessary to provide appropriate career guidance for gifted students. Enhanced counseling techniques can promote building meaningful relationships with students in order to understand their individual differences and interests. In any career-related program, guidance counselors have the potential to be one of the most accessible forms of supports for students. However, Kim's (2009) study demonstrated that guidance counselors have a lack of knowledge about gifted students' interests in professional areas. Therefore, increased professional development for counselors is essential for appropriate career-related guidance for students. Finally, schools should invest more effort in connecting academic courses with career achievement and try to provide students with high-quality academic experiences that better connect them with their career goals.

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CHAPTER 33

Talent Search

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WHAT IS TALENT SEARCH?

Talent Search, in the context of gifted education, is a program that uses off-level testing, using tests originally designed for older students with younger students who are already performing at the ceiling of the tests designed for their age or grade, to identify students' academic strengths, guide educational placement, and provide access to talent development programs. For example, a student in grade 7 is typically assessed using a test designed for students in grade 7. But through Talent Search, a high-achieving student in grade 7 takes the SAT, which is a test designed for high school students. Why would anyone give the SAT to a middle school student? Because some students in middle school have advanced skills and knowledge not easily measured by grade-level tests. By giving them an off-level test, and comparing their results to other high-achieving students taking that same test (and the high school students taking the test), counselors and educators get a different picture of what the student knows, understands, and is ready to learn. In general, grade-level tests don't provide enough information about a student's readiness to learn to be useful to schools for purposes of placing that student in appropriately accelerated coursework and providing the right kinds of talent development opportunities.

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Traditional grade-level assessments often fail to measure the variation among students who reach the upper limits, or ceiling, of grade-level tests. In other words, when a student in grade 7 scores at the 95th percentile or higher on a grade-level test, all that is known is that they have mastered the grade 7 material being tested. What if they have also mastered grade 8 and grade 9 material? Without knowing more about their academic abilities, how can appropriate plans be made for their education? Adaptive tests, such as STAR360 or NWEA MAP, have mitigated some ceiling effects. However, researchers are still examining item pool functioning and patterns of test error in adaptive tests. Even with a larger pool of test items available with adaptive tests, the item bank and the way items display may not be sufficient to accurately measure an advanced student's instructional needs (Zhang et al., 2013). In addition, grade-level adaptive tests do not currently provide the norming group achieved through Talent Search programs where all participants are known to be high achievers within their grade level.

The Talent Search philosophy is that children need to be assessed using tools commensurate with their abilities and developmental rates, not their chronological age or grade in school, so that appropriate academic planning for long-term talent development can be done (Olszewski-Kubilius & Kulieke, 2008). To measure the mathematical, verbal, and scientific reasoning abilities of students at the upper levels of grade-level tests, educators need a tool that can measure well above where a grade-level test stops. By taking off-level tests (tests designed for students at least 2 years above a student's current grade placement) through a Talent Search program, gifted students, their families, and educators gain a much more accurate and detailed understanding of where the student stands in relation to their gifted peers and what level of educational challenge is appropriate in key subject areas.

Although schools can conduct their own off-level tests, there are university-based and independent centers for gifted education across the United States that conduct off-level Talent Search programs annually, including the Center for Talent Development at Northwestern University, the Center for Talented Youth at Johns Hopkins University, the Belin-Blank Exceptional Student Talent Search at the University of Iowa, and the Center for Bright Kids in Denver, CO. All of these programs embrace the four tenets of Talent Search (Assouline & Lupkowski-Shoplik, 2012):

1. above-grade-level testing to assess high-achieving students' abilities and provide a benchmark for growth (talent identification/evaluation);
2. courses and instruction matched to students' assessed abilities in their domains of talent (placement in services and appropriate instruction);
3. supplemental, domain-specific programming offered outside of school to further students' talent development (opportunities for supplemental talent development); and

4. evidence of how accelerative and enrichment program models develop talent (effective, evidence-based best practices).

Talent Search is a comprehensive model with several decades of research and practice to support it. The Talent Search model was developed in the early 1970s when Dr. Julian Stanley of Johns Hopkins University first began offering the SAT to mathematically precocious middle school students to identify advanced mathematical reasoning ability. Today hundreds of thousands of students throughout the United States and in many other countries around the world participate in Talent Searches annually.

Why Do School Psychologists Need to Know About Talent Search?

In the current educational climate, benchmark testing is the norm, and there has been a growing emphasis on measuring students' academic growth and progress over time. Educators need assessment tools that accurately assess growth for advanced learners and help with academic planning and placement. Unfortunately, as described in the previous section, the most commonly used tools for measuring students' academic growth, grade-level achievement tests, are not wholly effective for measuring the abilities and growth of advanced learners. Talent Search is a viable option, a research-validated tool to assess academic abilities and determine needs. For school psychologists, who are often responsible for supporting school gifted and talented programs, Talent Search also provides a direct connection to resources and supplementary programs designed for advanced and gifted students, which will help plan course sequences and talent development opportunities through elementary, middle, and high school.

Diagnostic Information and Measuring Growth Over Time

Talent Search helps uncover areas of ability (e.g., math, verbal), in addition to levels of ability (Olszewski-Kubilius, 1998) within those areas. The tests allow schools to "distinguish students who are functioning slightly above grade level . . . from students in need of more substantial interventions, such as grade acceleration" (Calvert, 2018, p. 31). By knowing the areas and the level of ability, educators gain meaningful and useful insight into which types of courses and instruction will be too easy or slow paced and where instruction should be accel-

erated and/or enriched to provide appropriate challenge that will lead to talent development over the long term:

> the information provided by off-level testing also allows students, parents, teachers, and administrators to develop dynamic and individualized "pathways" toward self-discovery, opportunities for challenge and growth, and ultimately productive and fulfilling life work. Furthermore, it provides a means for continual monitoring of individual student progress in a way that takes into account their unique abilities and needs. (Thomson & Olszewski-Kubilius, 2014, p. 33)

Identifying and nurturing talent is valuable, but growth has become a higher priority with the passage of the Every Student Succeeds Act, and many state plans specifically require measuring student growth beyond proficiency. Measuring the growth of gifted students can be difficult, and off-level testing done by schools or through Talent Search is one solution. Table 33.1 describes how Talent Search, which is available to students in grades 3 through 9, can be used to measure growth.

For gifted students, Talent Search can provide the data used to identify students at risk for poor learning due to a lack of challenge, monitor student progress over time if they continue to participate in off-level testing annually, and provide recommendations and connections to programs and services that will best meet students' needs.

Educational Placement and Guidance

Using off-level scores, school psychologists can advise students about the types of courses and programs best suited to their needs, for example, taking required school courses such as biology or algebra 1 early or in a compacted format (e.g., completing a full-year high school course in 3 weeks in the summer) or enrichment programs that delve deeply into areas of strength and interest and connect young people with mentors (Corwith, 2018). Talent Search centers, like those at Northwestern, Johns Hopkins, and other institutions, offer enrichment and accelerated programs that supplement and/or replace typical school courses and programs (Corwith, 2018). These include programming on weekends, during the summer, and year-round through online platforms (Corwith, 2018).

Following a student's participation in Talent Search, families and school Talent Search coordinators receive the test score results and other informational resources, such as recommended course sequences within the content areas

Table 33.1
Talent Search Testing

	First-Time Testers	Subsequent Testers
Grade 3	PSAT 8/9 test for students scoring at the 95th percentile or above on a relevant subtest of a nationally normed achievement test.	
Grade 4	PSAT 8/9 test for students scoring at the 90th percentile or above on a relevant subtest of a nationally normed achievement test.	Retest on PSAT 8/9 if trying to track achievement and growth.
Grade 5	PSAT 8/9 test if scoring at the 90th percentile or above on a relevant subtest of a nationally normed achievement test.	Retest on PSAT 8/9 if trying to track achievement and growth.
Grade 6	PSAT 8/9 test for students scoring at the 90th percentile or above on a relevant subtest of a nationally normed achievement test; consider testing on the SAT or ACT if nationally normed grade-level achievement scores are at the 97th percentile or above.	Retest on PSAT 8/9 if trying to track achievement and PSAT 8/9 scores in grade 5 were below 540 in Evidence-Based Reading and Writing (EBRW) *and* below 490 in Math *and* below 970 for Total score. If scores were above the scores listed, or grade-level achievement was at 97th percentile or above, test on SAT or ACT.
Grade 7	Take either the SAT or ACT test if scores on a relevant subtest of a recent, nationally normed achievement test were at the 90th percentile or above.	
Grade 8	Take either the ACT or SAT if scoring at the 90th percentile or above on a relevant subtest of a nationally normed achievement test.	If monitoring growth, take the same test taken in grade 7. If looking to experience both assessments, take the test not taken in grade 7 (either SAT or ACT).
Grade 9	Take either the ACT or SAT if scoring at the 90th percentile or above on a relevant subtest of a nationally normed achievement test.	If monitoring growth, take the same test taken in grade 7.

Note. Information adapted from Center for Talent Development (2020).

assessed and program recommendations determined by the student's Talent Search scores. The basis for these course and program recommendations is the assessed differences in students' reasoning capabilities and the belief that these differences should be matched to educational programs that are appropriate in scope of knowledge and pace of teaching and learning (Olszewski-Kubilius, 1998). The recommended course sequences are aimed at giving students access to a systematic and continuous set of learning opportunities that develop talent over time.

Consider this example: Two eighth-grade students both score in the 98th percentile on the verbal composite of their grade-level state test. At this point, they look the same in terms of ability and achievement. Their gifted program coordinator signs them up for off-level testing, and when they take the SAT, the first student scores a 600 on the Evidence-Based Reading and Writing (EBRW) portion of the test while the second scores a 230. Using just their grade-level assessment results, these students would most likely be provided with similar courses and support services. But in reality, their needs are very different as evidenced by the off-level SAT results. They require different educational programs to be challenged and to reach their potential in the verbal area.

The student who receives a 230 EBRW score may benefit most from advanced coursework provided through differentiation within a cluster group in the regular classroom. In addition, the students could benefit from participation in enrichment courses in subjects that emphasize and require strong language arts skills. These enrichment opportunities could come through independent projects, Saturday classes, or online programs.

The student who receives an EBRW score of 600 is functioning like a student 4 or 5 years older than they are—at a level above that of the typical college-bound senior. For this student, an individualized program that allows the student to move at a more rapid (accelerated) pace within courses and access advanced courses that emphasize and require strong verbal reasoning skills is much more appropriate. Fast-paced summer courses, accelerated online programs, and opportunities to "test out" of curriculum are good possibilities. It may even be necessary to consider grade-skipping, early admission opportunities or dual enrollment in college courses, depending on a holistic assessment of the student's learning profile (e.g., early access to AP classes in language arts or the social sciences). Mentorships and internships would provide a connection to adults who share similar strength areas, encouraging exploration of interests and talents deeply in a real-life context in areas such as fiction writing or journalism.

In the case of both of these students, the typical grade-level curriculum, even with some extensions, is most likely insufficient, and long-range academic planning and early college and career planning will be necessary to keep them on track for future academic success. The Talent Search information gives educators a use-

ful estimate of learning rates and a blueprint for defining what types of opportunities will need to be provided to appropriately challenge the student.

Talent Development Opportunities

When students are involved in Talent Search, they are able to access a wide range of supplementary programs available through colleges, universities, and other educational organizations. These opportunities include summer programs, afterschool and Saturday programs, online courses, weekend workshops, and award ceremonies recognizing their achievements on the off-level Talent Search tests. In addition, they receive newsletters and information on contests and competitions and scholarship opportunities (for college or precollege programs). The resources provide access to a network of experts in the field and advice on acceleration, college planning, and social-emotional development (Lee et al., 2008; Olszewski-Kubilius, 1998).

The information and resources provided through Talent Search continue throughout the student's educational career (middle and high school, and even into college). Participation in Talent Search has the potential to impact talent development for the long term. Its effects have been shown to be pervasive and long lasting, and it is an entry to many valuable opportunities (Olszewski-Kubilius, 1998).

It is important to note that, in addition to students and families receiving access to programs and services, the school and the contact—typically the school psychologist or gifted program coordinator who helps coordinate Talent Search participation—also receive all of the diagnostic and program-related information. This is a significant value added for schools in providing an appropriate, systematic and continuous gifted program. Unfortunately, Talent Search is not always well understood or well known in schools, and only a small percentage of students who could participate and benefit actually do.

A Research-Validated Model

The SAT was first used off-level by Dr. Julian Stanley at Johns Hopkins University in 1972, and by the 1980s, the Talent Search model was adopted at other universities (Lupkowski-Shoplik et al., 2003). Since that time, considerable research (more than 400 articles) on the use of off-level testing and Talent Search's effects on gifted students has been conducted. Findings include the following:

- Research with the SAT supports using it as an aptitude test that measures ability especially well among gifted middle school students. It has also

been shown to measure a specific aptitude that develops over time (Brody & Benbow, 1990). Additional research supports the use of other Talent Search instruments (e.g., EXPLORE, PSAT 8/9, SCAT) to identify students as early as third grade.

- The tests are not too difficult for the students who take them. The percentage of students who score at the lower end of the scale is about the same as for the middle and high school populations that normally take the tests (Wilder & Casserly, 1988), and most students score above the chance level; many even score better than the average high school student taking the tests. For example, 41% of seventh graders and 62% of eighth graders assessed through Talent Search score above the mean of college-bound students on the reading subtest of the ACT. Similarly, 42% of seventh graders and 60% of eighth graders score above the mean of college bound students on SAT Evidence-Based Reading and Writing. Percentages of Talent Search students scoring above the mean college bound student for the ACT Math are 49% and 68% for seventh and eighth graders respectively, and for SAT Math are 44% and 63% for seventh and eighth graders respectively (Center for Talent Development, 2018). The performance of Talent Search participants has been consistently high since the inception of the program and demonstrates that the off-level tests are not too difficult for the young students taking them.
- Talent Search has short-term and long-term predictive validity. Students who participate in Talent Search continue to achieve at higher levels compared to other students, and above-level test scores are valid predictors of academic success (Brody & Mills, 2005). Even 10 years or more after participation in a Talent Search, the highest performing students in the Talent Search outperform their relatively lower-scoring Talent Search participating peers in academic accomplishments (Lubinski et al., 2001). Also, Talent Search scores, and particularly the "tilt" (higher in verbal versus science or math or vice versa) in scores, is predictive of choice of college major and career (e.g., humanities versus science or math). Scores are also predictive of career success, such as publishing articles, and creative accomplishments, such as earning a patent (Robertson et al., 2010).
- Finally, research shows that the course and program recommendations for students based on their Talent Search scores have validity, and the scores used for entrance to accelerative courses are valid. Multiple studies have shown that Talent Search test scores are correlated with success in accelerated programs (Brody & Mills, 2005). Additionally, students identified for and participating in Talent Search programs take more advanced courses in high school, and these students have higher educational aspira-

tions than peers with similar abilities who have not participated in Talent Search (Brody & Mills, 2005).

In summary, Talent Search has a strong research base both as a tool for educators and psychologists working with gifted children and as an educational program for talented students. No other gifted program model has as much research support as does Talent Search.

What Are Obstacles to Using Talent Search?

There are two obstacles that school systems may need to address before they can make best use of Talent Search: access and appropriate use of the test results.

The access issue is three pronged. First, Talent Search testing and the supplemental programs connected to it (through Talent Search centers) are operated by entities outside of the school system. Although schools can fairly easily use the concept of off-level testing, provide Talent Search test sites in the school or district, and create their own enrichment and accelerated programs for students, the resources and networks available through Talent Search programs are extensive and not easy to replicate. Participating in Talent Search requires personnel within the schools to identify qualified students and help them through the application process, including processes for financial aid, as many of the supplemental enrichment and accelerated programs offered charge tuition. If schools are not willing to participate in the process and serve as a liaison, students do not learn about the opportunities available to them or find out that they are eligible.

Second, participation in Talent Search testing is not free. There is a fee for the test and the resource material. Although the fees are reasonable (approximately $100, depending on the test selected) and students eligible for federally subsidized programs may qualify for fee waivers for the SAT or ACT, the fee may discourage or prohibit students from participating because schools typically require families to pay the fee. Schools that use the test results for instructional decision making and placement in services should consider paying testing costs, or at least a portion of them, to reduce the chance that cost is an obstacle to any family regardless of eligibility for a fee waiver. Similarly, the educational programs that are offered by the Talent Searches are mostly tuition-based and can be too expensive for some families without significant financial assistance. Although there are usually program scholarships available, there are still schools and families who choose not to participate because of the costs. Helping families understand the benefits, the costs, and how to navigate the application process can significantly reduce the

barriers to participation. Counselors need to approach families early about participation, financial aid and scholarship opportunities, and community resources that could be used to cover some of the costs (e.g., Title I funds).

Finally, eligibility for Talent Search is based largely on performance on grade-level achievement tests. Students who do not have test scores or who do not perform well on tests may not be identified by schools or families for participation. The eligibility issue can be resolved by using other tools—school performance, observations, rating scales, and recommendations—to qualify students for Talent Search (Lee & Olszewski-Kubilius, 2006). Talent Search programs allow students to participate with a recommendation from school personnel or parents. Any students demonstrating advanced ability or achievement, informed about what to expect from the assessment, and who want to participate, should be able to participate.

Although Talent Search is designed to help schools provide appropriate programs and services for advanced students, research suggests that not enough schools use the results for that purpose (Olszewski-Kubilius & Lee, 2005). More frequently, schools view Talent Search as a means of providing students out-of-school academic opportunities. Almost 75% of schools use Talent Search in that way, but the percentage of schools using Talent Search to create individual plans and placements for students in one study was 27% (Olszewski-Kubilius & Lee, 2005). There may be a number of reasons for this use of Talent Search, including the fact that many schools do not have a significant budget for gifted programs, they lack resources and personnel to oversee gifted programs, and there is no federal mandate for gifted education. Schools need to consider the true purpose and value of Talent Search, particularly its usefulness for identifying students who could benefit from accelerated programming (for a review of relevant research, see Olszewski-Kubilius, 2015), measuring growth and assisting with talent development, and creating high-quality gifted programs that align with the National Association for Gifted Children's (NAGC, 2019) Pre-K–Grade 12 Gifted Programming Standards.

How Does Talent Search Differ From Other Tests?

Schools use a variety of tests for many different purposes, but not all tests work well for all cohorts of students, as this chapter on Talent Search explains. When working with gifted students, it is critical that the test being used is valid for the purpose for which it is being used. Grade-level achievement tests are designed to measure specific knowledge and skills appropriate to a particular subject area at

a set level (age or grade). But, as has been discussed in this chapter, achievement test ceilings can be too low to get an accurate picture of an advanced student's knowledge and skills, making it difficult to match the student to an appropriate curriculum and plan for long-term talent development in various domains.

Aptitude tests differ from achievement tests in that they are designed to measure capacity to perform in an academic setting, and intelligence or cognitive abilities tests measure students' ability to reason and think—their analytic abilities. Information from these tests can be useful, particularly in understanding performance or potential, but the results do not provide specific information about academic needs in subject areas emphasized by schools (reading, science, math, social studies).

Recently, many schools have adopted the use of computerized, adaptive achievement tests, such as the Northwest Evaluation Association's (NWEA) Measures of Academic Progress (MAP). MAP is a diagnostic test that uses adaptive technology to measure knowledge and skills in subjects such as reading and mathematics. The test "adapts" to student performance—if a child answers a question correctly, the test makes the next question more challenging. If the child misses a question, the test provides an easier item next. The goal of MAP and other tests like it are to accurately measure achievement, provide evidence to help educators target instruction, and monitor growth in core subject areas (NWEA, n.d.).

Adaptive assessments offer information for parents and school personnel to consider to guide their teaching, but this does not replace or supplant what can be gained through off-level (PSAT 8/9, ACT, or SAT) testing. Talent Search testing can help school administrators make decisions about individual student placement and acceleration and give educators information on which to plan classes and programs for gifted and advanced students. In terms of individual students, an advantage of the Talent Search is that the tests have very high ceilings so they can accurately measure the abilities of students who are functioning well above grade level, and they can measure growth in math, reading, and science reasoning from one year to the next if they are taken repeatedly. The extensive history of Talent Search and the decades of data collected on above-grade-level test scores have produced norms and percentile rankings for each test based on younger students' performance. Comparing the performance of these high-achieving students to each other reveals their need for acceleration in the pace of instruction and level of content, provides insights into appropriate growth for advanced students, and helps educators assess the impact of programs and services.

Talent Search also provides practice on high-stakes tests in low-risk conditions, which can be particularly valuable for students who may not otherwise get exposure to these types of assessments until high school. Taking the ACT or SAT or both in grades 7, 8, or 9 can give students practice on important "gatekeeping"

tests as well as give them and their families information about the development of their abilities—information that can be used to guide course selections and participation in outside-of-school programs through middle and high school. On the basis of a student's performance on the ACT Math, expectations of what kinds of courses that student could or should take in high school may change, particularly if they have achieved college-ready benchmarks while in middle school. The results of the tests provide a very useful guide for parents who are concerned with making sure their children develop their abilities to their fullest potential in middle and high school.

How Can Talent Search Help School Psychologists?

Talent Search can provide several benefits to school psychologists, particularly as they engage in the identification of and academic planning for gifted students. First, Talent Search results provide a precise and research-validated means of matching the tested ability of a student to an intervention strategy and understanding the long-term benefits of programming (Lubinski & Benbow, 2006; VanTassel-Baska, 1984). Second, Talent Search helps pinpoint where additional testing or assessment may need to be conducted to better understand a student's performance. It is another powerful tool to be used in developing a student's profile and planning for academic success. For example, a student who scores at the highest ranges on the SAT through Talent Search, but who is performing below expectations in their classes, may need intervention and modifications to the curriculum. Third, Talent Search provides research, resources, and a network of experts who can assist in placing students into appropriately challenging courses and programs both in and out of school. Finally, Talent Search information offers support and resources to parents and the students themselves.

How Does Talent Search Fit Into a School's Programming for Gifted Students?

Talent Search is an integral part of any high-quality, comprehensive gifted program. It recommends a wide range of ways to accelerate and supplement students' educational activities to assure that challenge and rigor are available

throughout the school years. Talent Search starts with identification and, from that data, allows for the development of systematic and continuous programming at the individual and school level.

In terms of identification, NAGC's (2019) gifted programming standards require multiple methods of identification and tools that accurately reflect student skills and abilities. Talent Search is one of the most successful and research-supported tools used to accurately identify the needs of advanced learners, particularly those in the top 10% of the population. Talent Search will identify a pool of students who are 4 or more years beyond their age peers in terms of ability and offer recommendations on how to serve them in and out of the school.

Talent Search and its network of programs and services should be used to both expand and augment school services and to advocate for approaches like differentiation, acceleration (including grade acceleration and early entrance to kindergarten or college), and social-emotional support services. Using the information and recommendations provided by Talent Search can assure that students are placed in the appropriate classes and have a systematic and continuous plan for their education.

Finally, schools should use Talent Search as a way of planning for the allocation of resources including teaching staff, course sections offered, and budget dollars for in- and out-of-school enrichment activities. If Talent Search is used with students performing in the top 10% of grade-level peers from elementary through middle school, there will be a significant amount of data available regarding students' academic needs and recommended course sequences. This information will assist in future planning both at the individual student level and at the grade and school level. Having the diagnostic information is invaluable in long-range development of the school gifted program, making it more responsive and successful in meeting student needs.

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CHAPTER 34

Supporting Students With Gifts and Talents: The Role of School Counselors

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In 1983 Joyce VanTassel-Baska wrote that gifted and talented students' "affective and cognitive concerns require the assistance of a 'wise friend'" (p. 2). Since Leta Hollingworth's attention to the social and emotional needs of gifted students, the field of gifted education has always advocated for counseling and additional support for gifted students (Colangelo & Wood, 2015; Myers & Pace, 1986). In Hollingworth's mind, "the greater the gift, the greater the need for what she called 'emotional education'" (Colangelo & Davis, 2003, p. 7), or counseling and related educational supports. Traditionally, the counseling and guidance of gifted students has been the purview of those educators who know the students well and with whom they spend the majority of contact time—the classroom teacher. Teaching gifted students continues to be a challenging task that often has included the identification of talent, the creation of programming, and differentiating and modifying curriculum, all of which can detract from the time teachers may wish to devote to their students' nonacademic concerns. However, there is a resource upon which teachers can call: the professional school counselor.

The school counselor, with their distinctive role in the schools and their ethical mandate to serve all students, is in a unique position to both identify talent and support the academic, personal/social, and career development of gifted students. The school counselor has always been considered an integral part of the talent development of gifted students. This is reflected in an interesting fact: Gifted

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education and school counseling share a historical milestone. With the launch of Sputnik in 1957, the United States recognized it was lagging in the space race and needed to allocate federal resources to identifying and training the brightest minds in science, math, and technology, K–16. The 1958 National Defense Education Act (NDEA) was designed to bolster education in these areas as well as to fund guidance and counseling, ostensibly to help develop this new generation of talented scientists and engineers and guide them into appropriate career fields. Although any introduction to a school counseling course would include Sputnik, NDEA, and career guidance as important historical underpinnings of the profession, the implications of the school counselors' role in talent development or in gifted education may not be discussed.

In fact, what little research exists suggests that school counselors-in-training receive 3 or fewer *clock hours* in gifted education or on the needs, characteristics, and development of gifted students as part of their master's preparation program (Peterson & Wachter Morris, 2010). This lack of training is in stark contrast to the amount of training most school counselors have regarding students with special needs, as one *class* is required frequently by many state departments of education for licensure eligibility. The National Association for Gifted Children (NAGC) also believes that counselors need to be prepared to effectively work with this population. Their position statement on nurturing the gifted student' social and emotional development states:

> Given the salience of giftedness in social and emotional development and the likelihood that career and academic concerns have implications for well-being, school and other counselors need to be prepared to work with highly able students. Giftedness should be considered in case conceptualizations and treatment plans. Counselors in any venue can use information related to giftedness to normalize sensitivities and intensities, put developmental challenges and transitions into perspective, and make sense of classroom or social difficulties. (NAGC, 2009, p. 2)

Lack of training and lack of research geared specifically to school counselors' role and function limit their ability to serve gifted students as effectively as they may desire. The purpose of this chapter is to outline how school counselors can become active talent scouts, provide effective programming aligned with the American School Counselor Association's (ASCA, 2019b) National Model, and be the "wise friend" so many gifted students need.

The Role of the School Counselor in Gifted Education and Programming

Like every K–12 educator, school counselors are overwhelmingly busy. ASCA's analysis of the National Center for Educational Statistics' report on student-to-school counselor ratios suggests that caseloads are as high as 905 in Arizona, and as low as 191 in Vermont (ASCA, n.d.). The national average is 430 students to 1 counselor, while the recommended ratio is 250 to 1 (ASCA, n.d.). Between crisis intervention, facilitating child study teams, helping first-generation students with FAFSA forms, providing small-group counseling, and meeting with the building leadership team, the job of the school counselor can seem impossible. Yet, the priority for school counselors is, and has always been, the students they serve. In fact, ASCA's (2016) ethical code states that school counselors "have a primary obligation to the students" (p. 1). Gifted students are among the various student populations that school counselors serve.

ASCA's (2019b) position statement on the role of school counselors in gifted and talented student programs identify specific roles and functions that school counselors can fill when working with this student group. This position statement also acknowledges four primary assumptions upon which the school counselor's service rests: (a) Gifted and talented students have unique and diverse developmental needs that should be considered when school counselors create programming; (b) gifted and talented students, like all students, benefit from a safe school environment that supports the academic, career and social-emotional development of all students; (c) gifted and talented programming is beneficial for gifted students; and (d) programming and service to gifted students should be done via collaboration of the school counselor with other educators and school personnel.

Unique and Diverse Developmental Needs

As counselors are aware, no two clients are the same. This is also true of gifted students. Understanding how gifted students are different is a primary key to effective service. Fortunately, this updated version of the *Handbook for Counselors Serving Students With Gifts and Talents* provides a thorough overview of these differences. Peterson (2018a) summarized the pertinent characteristics:

> heightened sensitivity, intensity, asynchronous development, anxiety, perfectionism, introversion, existential depression, denied emotions, academic underachievement coupled with excellence in a talent area, career indecision, a desire to learn, the asset-burden

> paradox of giftedness, multipotentiality, and a strong sense of justice and fairness. Most of these have had research attention; existential depression, sensitivity, intensity, asynchrony, denied emotions, and a strong sense of justice have been discussed mostly by clinical professionals in the gifted-education literature. (p. 32)

Peterson also warned that counselors should never base assumptions about all gifted students based on any one gifted student they may encounter. Gifted students come from all backgrounds—from different cultures and ethnicities, family constellations, economic backgrounds, and communities. Gifted students identify with a range of gender identities and sexual orientations. Gifted students can be both talented and have a diagnosed disability: "In other words, gifted students can look and act like any other student; but they are unique and highly idiosyncratic, both individually and collectively" (Wood & Peterson, 2018, p. 3). Robinson (2002) agreed, "there is no more varied group of young people than the diverse group known as gifted children and adolescents" (p. xi).

Although these students are gifted, their gift or talent does not translate into an inoculation against life's challenges (Moon, 2009). School counselors should recognize that, like any other student group, gifted students are just as likely to struggle with separation and divorce of parents, death and loss, substance abuse, chronic illness, neglect or abuse, academic challenges, and difficulties in their relationships with friends and significant others (Cross & Cross, 2015; Peterson, 2015). School counselors are familiar with and help students through these struggles on a daily basis, but "because they are gifted, the way they experience the world and their own development is different" (Wood & Peterson, 2018, p. 2).

School Environment

Both NAGC (NAGC & The Association for the Gifted, Council for Exceptional Children [CEC-TAG], 2013) and ASCA (2019a) agree that a warm, safe learning environment that is both inclusive and culturally responsive is vital to the development of gifted students' talent development. Robinson and Bryant (2012) noted that not every educational system is understanding of or responsive to the needs of gifted learners. The relationships among school personnel and between personnel and students can create or inhibit the degree to which students feel they belong in, or are connected to, the school they attend.

Research suggests that the relationship a gifted student has with their teacher is "crucial" and "makes all the difference" to the gifted student (Robinson & Bryant, 2012, p. 427). The effects teachers have on their gifted students' talent

development "are the most significant and observable results documented in recent literature" (Lee, 2016, p. 194). Teachers have a great deal to give to their gifted students, including personalized differentiated curriculum (Siegle et al., 2014), which can be connected meaningfully to real-world issues (Coxbill et al., 2013). Teachers provide mentoring, feedback, and encouragement (Croft, 2003; Lee, 2016), and "reinforce and open up specific avenues for students to follow" (Watters, 2010, p. 235) with regard to their future career planning. Naturally, the degree to which a teacher facilitates a positive relationship with their students is predicated on training, professional development, and attitudes (McCoach & Siegle, 2007; Robinson & Bryant, 2012; Watters, 2010).

Peer perception and attitudes also play a role in school environments. Research pertaining to gifted students and their peer relationships is complex and somewhat conflicting. Again, because no two gifted students are alike, school counselors should recognize that some gifted students may very well have difficulties making meaningful connections and friendships with like-minded peers, and others will have no trouble at all. School counselors may find the concept of the Stigma of Giftedness Paradigm (SGP) useful to understand peer dynamics (Coleman, 2012). This theory proposes that gifted students: (a) want normal interactions with peers, (b) are aware they are both perceived differently and treated differently by their peers if the fact that they are gifted is known, and (c) "manage information" about themselves and their gift/talent in order to cope more effectively with negative peer interactions such as bullying. Gifted students may manage in a number of ways, including using humor, denying, hiding or downplaying their gift, or deflecting attention away from themselves (Swiatek, 2012). Chapters in the current text expound upon the topics of peer and teacher relationships in more detail.

Collaboration and Consultation

Of school counselors' unique roles, that of collaborative peer and consultant have been a constant in their daily lives. Between collaboration and consultation, school environments can be changed to reflect "equity, access, and academic success for every student" (ASCA, 2012, p. 6), including gifted students. Collaboration is a direct service to and with fellow educators, family members, and community members. Consultation is an indirect service designed to help students through helping the consultee (Perera-Diltz et al., 2011; Peterson, 2007). Working together with gifted education teachers, school counselors can: (a) provide support for classroom meetings that integrate social and emotional learning (Peterson, 2018b); (b) brainstorm ways to differentiate curriculum for gifted students based on need, ability, and development (Peterson, 2007); (c) help

respond to common questions or concerns that family members of gifted students may have, including identification, programming, acceleration or other services for a gifted student (Chandler, 2012; Wood et al., 2010); and (d) identify and make referrals to community resources for counseling or other services (Peterson, 2007).

Although gifted education teachers may both need and want to work collaboratively with school counselors (Matthews et al., 2007), they may not get the time or support to develop that working alliance. Based on her findings from a qualitative study, Wood (2012) suggested that gifted educators and school counselors have a great deal in common, including experiencing feelings of isolation and misunderstanding of their role and function by other educators, experiencing lack of resources while balancing challenging schedules, and ineffective communication and sharing of information. To promote collaboration, school counselors may need to reach out first, with a stance of curiosity, respect, and a "one down" power position that acknowledges the expertise of their colleague. From there each party can learn about what exactly their colleague does in order to identify complementary areas of expertise (e.g., class schedules, integration of social and emotional learning; Wood, 2012, 2018a). Support for collaboration is critical for a positive school climate (Bemak, 2000). School counselors should consider ways they can collaborate with administrators in order to promote an effective, vibrant gifted education program in their buildings: "Strong, positive leadership can mean the difference between toxic and healthy school climates for all students, including gifted students" (Wood, 2018a, p. 167).

Effective Services Through the ASCA National Model

According to ASCA's (2019b) position statement, the school counselor addresses the unique needs of gifted students "within the scope of the school counseling program and in collaboration with other educators and stakeholders" (p. 32). School counselors can refer to this statement for details as to what types of services they can provide, which include: (a) supporting their schools'/districts' identification process with a specific eye toward identifying marginalized students from underrepresented groups; (b) advocating for and participating in programming and opportunities for gifted students that address their academic, career, and personal/social needs; (c) promoting awareness of and professional development around those needs; (d) providing services such as individual and group counseling and collaboration with family members; (e) creating and providing strategies for the success of culturally diverse gifted students; (f) collaborat-

ing with other school personnel; and (g) keeping up to date on current research and best practices for working with gifted students. "But how," school counselors may ask, "am I supposed to do all of that on top of my already challenging job demands?"

The key is not to think "more" but to think "different." School counselors can enact these suggested actions through their everyday practice and in alignment with the ASCA (2019a) National Model. Since its first iteration in 2002, the ASCA National Model has been revised four times and currently reflects four specific quadrants as part of the overall comprehensive school counseling program: Define, Deliver, Manage, and Assess (ASCA, 2019a). The roles described in the position statement do not provide a road map for how they should fit each of the four quadrants, so the following ideas are offered as suggestions.

Define

The two broad concepts of student standards and professional standards comprise the "Define" quadrant. ASCA's school counselor competencies (2019a), *Ethical Standards for School Counselors* (2016), and *Mindsets and Behaviors for Student Success* (2014) provide critical foundation pieces of any school counseling program. The school counselor competencies include language related to school counselors' understanding and knowledge of developmental and learning theory (I-A-8, II-A-3), which could include theories and models of giftedness. School counselors may also wish to review the competencies related to identification and address student barriers to education (I-A-3, III-B-3b) and to find resources for students who are not successful in school (III-B-3f; ASCA, 2016), which could include gifted students for whom the mismatch between intellectual need and educational environment is a common concern. Perhaps the most pertinent ethical code pertaining to gifted students would be A-10-f, advocating for "the equal right and access to free, appropriate public education for all youth, in which students are not stigmatized or isolated based on specific labels or identifiers, including "any other exceptionality or special need" (ASCA, 2016, p. 5).

Deliver

The ASCA (2012, 2019a) Model and best practices encourage school counselors to spend 80% of their time allocation in service delivery, specifically to students in the three areas of personal/social, academic, and career development. Typically, this service encompasses the traditional functions of school counselors: individual and small-group counseling sessions, classroom guidance lesson deliv-

ery, and consultation with educators and parents. School counselors also provide referrals for additional services and create community partnerships. All of these duties can relate specifically to gifted and talented students.

Individual counseling sessions are as varied as the gifted students who participate in them. School counselors may find themselves listening to their gifted students unpack and explore their concerns in any one of the three areas (academic, personal/social, and career/college). Regardless of the topic area, all of these concerns will be experienced through the unique characteristics and developmental patterns discussed previously. As an example, a gifted student might offer feeling "out of place" in their classrooms. Feeling out of place could be a result of many factors; thus the student and school counselor may find they spend the next several sessions exploring asynchronous development and social desynchrony; required classes versus academic relevance; how academics connects to the world of work; the role of values, abilities, and meaning in career decision making; and the disconcerting message "you're good at everything; you can do it all" when the student firmly believes they have a calling to a specific field. This student could benefit from small-group counseling or bibliotherapy using biographies of eminent individuals in the profession to which the student feels called. Peterson (2018b) provided the following ideas for classroom guidance and small-group services:

- Utilize already established frameworks and models from both school counseling and gifted education to guide classroom guidance delivery, such as the ASCA Mindsets and Behaviors or the Integrated Curriculum Model. Gifted students benefit from talking about coping, identifying and expressing emotions, developmental challenges, and relationships, all of which could be incorporated into language arts and social studies core content areas. School counselors and teachers of the gifted can develop creative, cross-disciplinary lessons. Other ideas would be whole-class or small group bibliotherapeutic approaches, or guided film discussions (Hébert & Hammond, 2006; Hébert & Kent, 2000).
- Be proactive by the provision of small groups, which can incorporate discussion, psychoeducation, and activities, and which "foster respect, compassion, and connection" (Peterson, 2018b, p. 106). Through these groups, gifted students can expand beyond talking about academic performance, to how they are struggling and coping with common challenges.

Manage

The management component of the model includes program planning and is the area that best describes the documentation and logistics that facilitate the

function of a school counseling program. These documents include program calendars, action plans, mission statements, program-administrator agreements, use of an advisory board, time-on-task calculations, student outcome goals, and school data summaries.

School counselors can utilize these documents to evaluate their degree of interface and involvement in gifted education programming. For example, although program action plans traditionally provide plans to address specific areas of academic achievement gaps, they can be used to identify and address any educational barrier. Action plans could provide important information about how the current identification practices are working, including their ability to identify underrepresented gifted students, or race and gender representation in advanced and honors coursework, as well as strategies to address these inequities (Wood, 2018b). Program calendars could illustrate specific time points in which school counselors and gifted educators collaborate, such as deadlines for talent development searches, visits to colleges, or opportunities for job shadowing or apprenticeships (Wood, 2018b). School counselors may wish to review their program mission statements as well as those of the building and district to determine where their service to gifted students fit with these. ASCA (2012, 2019a) suggested that school counselors focus less on what they do and more on how their students are different as a result of the work a school counselor does. School counselors could consider how their gifted students specifically are different (and preferably) better off as a result of their services.

Assess

This quadrant of the model is really where school counselors learn exactly how their students are different as part of the services described in their plans. The "Assess" component includes major program data points, such as the program assessment, action plan outcome data from small groups, classroom guidance, and individual counseling sessions, and the school counselor appraisal conducted by building administration. Here, school counselors can find the answers to "I wonder if . . . ?" Did their targeted academic and career planning for underrepresented gifted students yield more enrollment in advanced coursework or more young women in STEM-related enrichment programs? They may wish to then compare these data to district, state, or national data sets to determine where and how more changes could be made. If school counselors and gifted education teachers collaborated on integrating social and emotional learning into gifted programming, have both parties seen a decrease of problematic behavior or an increase in feelings of belonging and connectedness? Did small groups designed to provide postsecondary planning to students with low grade point average but high

test scores result in more juniors taking college entrance exams? Have counselors noted any trends in cumulative files that speak to a marked decline in grades of students generally viewed as high academic achievers?

In conclusion, the ASCA (2019a) National Model provides a framework in which school counselors can nest their specific services to gifted students. In their roles as leaders and advocates, school counselors may find themselves in the position of "raising uncomfortable questions in order to acknowledge, explore, and redress barriers to students' educational progress" (Wood et al., 2018, p. 207). Yet ASCA's (2019b) position statement specifically identifies advocacy as one critical role that school counselors play in the talent development process of gifted students.

Implications

The bulk of this chapter included a rationale for why school counselors are vital to gifted students' talent development, and a series of recommendations as to how they can nurture that talent in alignment with their already established roles and functions. The last specified task of the school counselor, according to ASCA's (2019b) position statement, is "to seek to keep current on the latest gifted and talented programming research and recommendations" (p. 33). Professional development can make a difference in school counselors' awareness and understanding of gifted students as a special population (Carlson et al., 2017; Peterson, 2013), their ability to advocate for services and their self-efficacy in the role of advocate (Goldsmith, 2011; Wood et al., 2018), and their provision of differentiated counseling services that meet gifted students where they are in their unique development (Wood, 2010). Professional development through conference attendance, reading, and online opportunity can ameliorate the lack of knowledge that can leave school counselors feeling unprepared to meet the needs of gifted students. Perhaps more importantly, genuine effective counseling services as a result of increased awareness and knowledge could result in fewer gifted students believing that school counselors are for "other kids" but not them (Peterson, 2003, p. 64). Perhaps a better understanding of and commitment to serving gifted students can lead them to seeing their school counselor as a "wise friend."

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CHAPTER 35

Collaborative Efforts Between School Counselors and School Psychologists

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Survey data published in the last 10 years suggest that school psychologists and school counselors alike receive little preparation to support gifted and talented students (Peterson & Morris, 2010; Robertson et al., 2011; Wood et al., 2010). Nevertheless, the increasing expectation for both groups of professionals to help foster responsive learning environments for all students, provide school-based mental health support, and adopt a social justice orientation by promoting equitable practices in K–12 schools provides a ripe opportunity for school psychologists and school counselors to join together and support gifted and talented learners (American School Counselor Association [ASCA], 2018, 2019; National Association of School Psychologists [NASP], 2020). This position is supported by federal mandates (i.e., Every Student Succeeds Act [ESSA] of 2015) emphasizing the school personnel's responsibility to provide comprehensive services targeting students' social-emotional, behavioral, and academic development. Indeed, school counselors and school psychologists are listed as essential personnel who can contribute to comprehensive service delivery given their professional expertise.

Through collaboration and consultation, school psychologists and school counselors can utilize their unique and shared training to ensure that gifted and talented students receive adequate support in response to their needs. School psychologists, for example, are well-trained to use psychoeducational assessment data

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to inform intervention implementation and academic programing (NASP, 2020). School counselors, on the other hand, may have more knowledge relative to academic services available for students in their respective schools, given their traditional role in helping students with educational course and program placement (ASCA, 2003, 2019). Furthermore, both groups of professionals receive extensive training in providing social-emotional and behavioral services for school-age youth (ASCA, 2019; NASP, 2020), making them well-equipped to meet the needs of gifted and talented learners who may require mental health support.

This chapter will review how school psychologists and school counselors can provide collaborative services to ensure that gifted and talented learners receive academic, social-emotional, and behavioral services that are responsive to their individual needs. Specific attention to data-based decision making and social justice considerations will be reviewed in each section: (a) academic identification and support, and (b) social-emotional/behavioral identification and support.

Academic Identification and Support

Services for gifted and talented learners are governed by state and local education agencies because federal legislation outlining policies for these students does not exist (National Association for Gifted Children [NAGC] & Council of State Directors of Programs for the Gifted [CSDPG], 2015; Stephens, 2020). Thus, to determine which students should receive additional support due to their exceptionality, researchers and practitioners have largely focused on how gifted and talented students are identified and what educational support is most appropriate based on their identified needs.

The most common approach to identifying gifted and talented students includes the solicitation of teacher and parent referrals, followed by the administration of a standardized test of cognitive ability to determine a student's intellectual quotient (IQ; McClain & Pfeiffer, 2012; NAGC & CSDPG, 2015; Robertson et al., 2011). Regarding the latter, this approach typically requires students to complete the verbal and/or nonverbal portions of norm-referenced cognitive assessments and obtain a score in the 98th or 99th percentile (or in the 90th to 95th percentile for students from low-income backgrounds) compared to their same-age peers (Silverman & Gilman, 2020). In addition to the use of cognitive ability tests, school personnel at the local level may also require additional assessments, such as an examination of students' work products (often referred to as a portfolio review) or academic achievement testing (Worrell et al., 2019). The widespread use of high IQ scores for gifted identification is largely influenced by two factors: (1) the historical use of cognitive tests as a gatekeeping tool in the

educational system for academic decision making (i.e., placement in special programs), and (2) the most common conceptualization of "giftedness" (Newman, 2008; Worrell et al., 2019). Although individual states and jurisdictions in the United States are given the latitude to set their own definition of giftedness and processes related to gifted education, most states (n = 34) include intelligence (or intellectually gifted) as a main aspect of gifted identification (NAGC & CSDPG, 2015).

School counselors are not expected to administer cognitive assessments; however, ASCA (2003) contended that school counselors should be prepared to interpret the results of these instruments to inform academic planning and support. School psychologists have extensive experience administering and interpreting cognitive tests (Sotelo-Dynega & Dixon, 2014), yet 66.2% of school psychologists who participated in a survey-based study reported that they never or rarely conducted gifted evaluations (Robertson et al., 2011). Silverman and Gilman (2020) highlighted a need for school psychologists to take a leading role in gifted identification given their "wisdom" and expertise of cognitive assessments; school psychologists can consult with school counselors to help them interpret specific scores and the implications of assessment results for serving school-age students.

A discussion of traditional methods of gifted identification is particularly important, given the ongoing criticism regarding the lack of representation of marginalized students in gifted and talented programs (McClain & Pfeiffer, 2012; Stephens, 2020; Worrell et al., 2019). Consequently, with key decision makers—teachers, administrators, and gifted education specialists—holding different perspectives about the best way to identify students for gifted programming (Schroth & Helfer, 2008), and some educators approaching gifted education from a "colorblind" lens (Ottwein, 2020), school psychologists and school counselors can advocate for alternative methods of identifying exceptional students. From a social justice perspective, the goal therein is to provide professional development and consultation for various stakeholders to ensure that underrepresented students have equitable access to gifted and talented programing.

Data-Based Decision Making: Identification of Gifted Students

A major criticism regarding the use of IQ scores as the "gold standard" for gifted identification is the lack of representation of marginalized youth in gifted and talented programing. Students from ethnic-racial minoritized groups generally obtain lower average scores on measures of cognitive ability. Divergent performance on these measures among ethnic-racial minoritized youth has been partially attributed to limited access to a range of opportunities, which is especially

the case for students from ethnic-racial minoritized groups who come from lower socioeconomic backgrounds (Ottwein, 2020; Worrell et al., 2019). Because most states place heavy emphasis on a rigid cut score (again often two standard deviations above the mean) to determine who will receive gifted services, students from ethnic-racial minoritized groups are less likely to be identified as "capable" of succeeding in related programing.

McClain and Pfeiffer (2012) found that 39 states (78%) included high achievement as an additional indicator of student ability instead of relying on cognitive assessments alone. The additional emphasis on academic achievement may be influenced by Julian Stanley's notion of Talent Search, as discussed by Worrell et al. (2019). Stanley postulated that some students demonstrate exceptional performance (in the top 1%) in mathematical ability and verbal ability, and thus require classroom instruction matched to their domain-specific abilities. Although the use of achievement tests may serve to eradicate issues of disproportionality, one could argue that the results of these tests also may reflect educational inequities between underrepresented and privileged students. Accordingly, some states acknowledge factors such as creativity, performing/visual arts, and other academic areas as additional indicators of exceptionality, which is consistent with the idea of talent development (see Worrell et al., 2019). Most states, however, use the terminology *gifted and talented* rather than *gifted* alone in reference to students who demonstrate extraordinary skills relative to their peers (McClain & Pfeiffer, 2012).

Reconceptualizing Gifted Identification. An overall objective in expanding the definition of giftedness beyond a single IQ score is to acknowledge the heterogeneity of gifted and talented students and to cast a wider net, with a particular focus on students from minoritized backgrounds (Harris et al., 2007; Pfeiffer & Blei, 2008; Worrell et al., 2019). Nevertheless, as minoritized students are still underrepresented in gifted programming, it is critical that school psychologists and school counselors adopt a social justice lens by "seeing color" and understanding the opportunity gap between students from lower and higher socioeconomic backgrounds. By approaching their work from this perspective, school counselors and school psychologists can advocate for the use of gifted and talent identification approaches that are consistent with best practices (Worrell et al., 2019). Advocacy at the local level is particularly critical, given that few states have specific mandates or procedures for identifying students from ethnic-racial minoritized groups (including English language learners [ELLs] and English as a second language [ESL] learners) and youth from low socioeconomic backgrounds (McClain & Pfeiffer, 2012). As recommended in the current literature, the following strategies for gifted identification should be used as a multipronged approach. Furthermore, gifted identification should be available at any point during a child's academic

career, given that giftedness represents a developmental process that can fluctuate with time (McLain & Pfeiffer, 2012). Strategies include:

- **Universal screening:** One aim of universal screening is to "supplement the traditional referral system and boost referral rates for underrepresented groups" (Card & Giuliano, 2016, p. 13678). Universal screening typically entails administering a brief formal assessment tool, such as a rating scale, cognitive ability test, or academic achievement measure, using individual or group testing for all students in a particular grade-level, followed by completing a more extensive evaluation for students who obtain a specified score (Card & Giuliano, 2016; Lakin et al., 2016).
- **Prudent use of cognitive measures:** Despite the criticism of using cognitive assessments to identify gifted learners, Worrell et al. (2019) contended that they may hold some utility for predicting student achievement and later job success. Thus, if schools opt to retain their emphasis on IQ for students who are viewed as "intellectually gifted," a more prudent use of cognitive assessment is recommended. This includes moving away from a single cut score (considering the standard error of measurement and twice-exceptional students; Silverman & Gilman, 2020); reviewing subscale scores, given that gifted students may have strengths and weaknesses in different domains (e.g., it is not uncommon for gifted students to obtain lower scores on processing speed and working memory tasks; Silverman & Gilman, 2020); administering tests in the child's native language as well as in English (Harris et al., 2007); and coupling the use of these measures with other assessments to alert key decision makers to more meaningful aspects of students' exceptionality (Worrell et al., 2019). Furthermore, the sole use of nonverbal and/or spatial tasks with minoritized groups for placement in gifted programs is inappropriate, as this approach does not have established validity (Worrell et al., 2019).
- **Authentic, performance, and dynamic assessments:** Performance-based assessment entails requiring students to act in a prescribed way or generate an original product or response. Examples may include having a student audition for the performing arts, author a story, engage in verbal problem solving, complete mathematical reasoning tasks, or design an experiment. Authentic assessments, which are portfolio-based, refer to a collection of students' work products and accomplishments that are examined during the gifted and talented evaluation process. Finally, dynamic assessment includes requiring students to complete a task quickly and successfully in real time after receiving instruction on how to solve the problem. For each of these approaches, evaluators can use rubrics to determine the quality of the product or performance (Pfeiffer & Blei, 2008; Worrell et al., 2019).

- **Behavioral and gifted rating scales:** Behavioral and gifted rating scales are comprised of both standardized and nonstandardized instruments that require teachers, parents, etc., to report the degree to which students demonstrate specific behaviors and characteristics. Although these instruments are subjected to rater biases, one benefit of using ratings scales is that they capture additional qualities (e.g., leadership skills, artistic talent, etc.) that may represent students' exceptionality (Pfeiffer & Blei, 2008).
- **Reconsider the use of teacher referral:** Teacher nomination and referral is a common source of initial identification for gifted and talented programing. However, teacher referral contributes to the underrepresentation of culturally diverse students in gifted education due to their biases and limited training (Ottwein, 2020). As such, school psychologists and school counselors can solicit teacher input to understand a student's classroom behaviors, academic performance, etc., but advocate for the elimination of teacher nomination as the sole mechanism for initial identification.
- **Access to challenging curriculum:** Granting minoritized students access to academic enrichment and accelerated coursework represents a reversed approach to gifted identification. In this sense, teachers can provide enriched and supportive experiences for underrepresented students, followed by a close examination on how they perform in these types of environments. Students who demonstrate exceptional success may go on to undergo a "formal" evaluation for continued placement in gifted programs (Worrell et al., 2019). When deciding to pursue a formal evaluation, we contend that school personnel should strongly consider why additional testing is warranted. For example, if testing is used for further educational planning, completing a formal evaluation as a method of data-based decision making can be informative. If testing is conducted simply for the sake of maintaining the status quo, or conforming to the traditional method of identifying gifted and talented students, additional testing may not be necessary at the time.

Academic Support for Gifted and Talented Learners

Providing academic programming and support should be the ultimate goal of gifted evaluations. Typical support for students identified as gifted and talented learners include acceleration and enrichment (Shaunessy-Dedrick & Lazarou, 2020; Worrell et al., 2019). Accelerated learning experiences are those that provide students opportunities to progress through the curriculum at a faster pace compared to their peers (e.g., grade-skipping, subject acceleration, advanced placement; Shaunessy-Dedrick & Lazarou, 2020). Enrichment, on the other

hand, involves students "exploring traditional subjects in greater depth . . . or having students learn topics in disciplines that are not usually included in their school curriculum" (Worrell et al., 2019, p. 567). Gifted and talented students may also receive differentiated instruction in general education classrooms alongside their peers, given the current push for inclusive, heterogeneous classrooms. Differentiated instruction typically entails teachers adapting instruction and class requirements to meet the needs of diverse learners (Shaunessy-Dedrick & Lazarou, 2020). Although each of these methods show promise for providing appropriate academic support for gifted learners, students may not receive these opportunities as often as they should (Shaunessy-Dedrick & Lazarou, 2020).

Using the aforementioned assessment data, school psychologists can help school counselors identify specific supports students may need and advocate for the provision of appropriate support. A student who demonstrates exceptional mathematical skills, for example, may benefit from enrolling in advanced math courses to realize their full potential. Because opportunities for acceleration and enrichment may not occur in the school setting, school counselors can also utilize community asset mapping as discussed by Griffin and Farris (2010) to identify additional resources in the community that students may access. This is especially important for students who attend underresourced schools, where supplemental supports for advanced learners are likely unavailable due to budget restraints.

Academically Struggling Students. Bain et al. (2007) examined undergraduate preservice teachers' perceptions of gifted students. Participants in Bain et al.'s study perceived that gifted students should be able to succeed without extra support. Contrary to the belief that gifted and talented students are consistently motivated and require little assistance to excel, it is important to remember that gifted and talented students can experience academic difficulties in school. For example, some gifted and talented students may require additional reading interventions as they excel in math and science. School psychologists with expertise in screening and assessment can help identify these students by advocating for or directly administering universal screeners of academic achievement (e.g., curriculum-based measures). Consistent with the core tenets of Multi-Tiered Systems of Support (MTSS), school psychologists also can consult with school counselors or other educators to identify appropriate interventions these students may need (e.g., receiving small-group reading support in or outside of the classroom) and assessments to use for progress monitoring.

Twice-Exceptional Students. Other gifted and talented students may demonstrate significant difficulties and thus require special education services. These students are referred to as twice-exceptional, given their status as being gifted/talented *and* having a disability (Neihart, 2008; Shaunessy-Dedrick & Lazarou, 2020). Unfortunately, these students may not receive the comprehensive support

they need—that being services aimed at cultivating their "giftedness" and targeting their difficulties—because their disability will likely take priority over their ability (Shaunessy-Dedrick & Lazarou, 2020). Furthermore, educators may miss these students during initial identification or assume that they cannot succeed in gifted and talented programming because they may demonstrate behaviors that are deemed to be atypical of gifted students. Examples of these behaviors include work avoidance, classroom disruption, inattentiveness, poor performance in a specific subject area, and other social-emotional challenges (e.g., anxiety and depression; Neihart, 2008). As part of a comprehensive evaluation that school psychologists are typically required to complete, practitioners can identify areas of strengths and difficulty for gifted and talented students and collaborate with school counselors to determine intervention options for remediation, alongside service options for enrichment and acceleration.

Social, Emotional, and Behavioral Identification and Support

Supporting all groups of students involves the provision of interventions targeting social, emotional, and behavioral well-being, given that these domains of student development can impact student achievement (Suldo et al., 2014). Similar to general education students, gifted and talented students will likely not succeed academically without school personnel responding to their social, emotional, and behavioral needs. Unfortunately, giftedness is accompanied by many misconceptions relative to students' social, emotional, and behavioral development. One perspective, for example, views gifted students as being immune to emotional or behavioral issues (Nail & Evans, 1997). This idea may be attributed to seminal research indicating that gifted students may display more positive feelings and lower levels of psychopathology, or emotional and behavioral risks, compared to their peers (Eklund et al., 2015; Martin et al., 2010; Suldo, Hearon, & Shaunessy-Dedrick, 2018). On the other hand, the competing perspective views giftedness as being related to maladjustment due to what has long been referred to as their asynchronous development (Worrell et al., 2019).

When students' social, emotional, and behavioral issues are attributed to their giftedness or when students are thought to be immune to the possibility of experiencing such issues, their needs will likely not be met (Nail & Evans, 1997). For example, educators may be hesitant to place gifted and talented students in self-contained classrooms due to an assumption that this will cause social harm. On the other hand, educators may assume that these students do not require additional social-emotional support due to their presumed resilience compared

to general education students. Educators must view gifted and talented students as individuals, taking their contexts, needs, and circumstance into consideration, rather than relying solely on their label as the determining factor for how they are perceived. Indeed, not providing social, emotional, and behavioral interventions for gifted and talented students based on ill-informed ideas is antithetical to notions of social justice. As school psychologists and school counselors are called to provide school-based mental health support for all students, gifted and talented students cannot be left out of the equation.

Perfectionism, Social Isolation, and Bullying

Gifted and talented students may encounter unique challenges in addition to typical mental health difficulties any youth can experience (e.g., anxiety, depression). We recognize that gifted and talented students are not a monolithic group; however, we provide a review of some social, emotional, and behavioral challenges these students may experience to remind school mental health providers about issues that may be present at the group level, with the ultimate goal of providing culturally responsive support (Betters-Bubon et al., 2016; Jones, 2014).

Perfectionism. Although various conceptualizations of perfectionism have been discussed in the literature, scholars generally concur that perfectionism is represented by two core subcomponents: maladaptive perfectionism and adaptive perfectionism. Maladaptive perfectionism is typically defined as one feeling distressed when mistakes are made or when there is a discrepancy between one's performance and expectations/high standards. Adaptive perfectionism, on the other hand, entails one setting high goals, having high personal standards, and being organized and concerned with order and neatness (Flett & Hewitt, 2002; Slaney et al., 2001). The adaptive type of perfectionism is presumed to be "healthy" in nature because it is associated with gifted and talented students (including high-ability learners) utilizing more helpful coping strategies when they encounter obstacles (e.g., Mofield et al., 2016) and experiencing higher levels of internalized motivation in school (e.g., Fletcher & Speirs Neumeister, 2012). In addition to these two categories, researchers have also discussed the source of one's perfectionism as reflecting an adaptive and maladaptive style. Self-prescribed perfectionism is conceptualized as one setting high personal standards for themselves (adaptive), and socially prescribed perfectionism involves the perception that others demand perfectionism from the self (maladaptive; Fletcher & Speirs Neumeister, 2012; Hewitt & Flett, 1991; Huggins et al., 2008).

Perfectionism is one characteristic that individuals may automatically associate with giftedness. However, a recent meta-analysis executed by Stricker et al. (2020) suggests that intellectually gifted students may display equal levels of mal-

adaptive perfectionism compared to their nongifted peers but display elevated levels of adaptive perfectionism. The experience of maladaptive perfectionism is problematic for gifted and talented (and high-ability) students because it is linked to symptoms associated with internalizing disorders, such as anxiety, sadness, and reduced happiness (Shaunessy et al., 2011; Stornelli et al., 2009). Consequently, gifted students may experience other self-defeating behaviors, including academic work avoidance due to a fear of failure and self-doubt (Mofield et al., 2016). It is also important to note that adaptive perfectionism is not always helpful, as gifted students who reported having high personal goals (adaptive perfectionism) in Mofield et al.'s (2016) study also reported responding to stressors in a debilitating manner, such as engaging in excessive worry, crying, or becoming upset. This may be attributed to gifted and talented students experiencing high levels of evaluative concern, or socially prescribed perfectionism (Hewitt & Flett, 1991), where students may worry about being criticized by other individuals (e.g., adults in their environment) who pressure them to be perfect (Speirs Neumeister, 2016).

Social Relationships: Loneliness and Isolation. Gifted students are often presumed to experience elevated loneliness and social isolation due to their unique exceptionality compared to their peers. Recent scholarship, however, suggests that gifted students do not experience higher levels of loneliness compared to their peers (Campbell, 2017), nor do they experience significant difficulties when forming relationships with their peers (Lee et al., 2012). Furthermore, gifted students may demonstrate a preference for working alone when they feel less supported in their classroom environment, as perceived support bolsters students' comfort and willingness to participate in social groups (French et al., 2011). On the other hand, it is common for intellectually gifted students to feel out of place among their same-age peers and seek out older peers who have a similar intellect or similar interests (Robinson, 2008). Likewise, gifted adolescent students who participated in the Kitsantas et al. (2017) study reported that they enjoyed interacting with like-ability peers because it motivated them to push themselves in their academics and to learn from each other. Elementary-age gifted students who participated in Eddles-Hirsch et al.'s (2012) study indicated that they felt more understood and accepted by their like-ability peers and appreciated the time they spent with one another. In contrast, gifted students who are served in self-contained classes alone may miss interacting with friends in general education classrooms and thus desire more interaction with mixed-ability peers (Adams-Byers et al., 2004; Eddles-Hirsch et al., 2012). Together, these findings suggest that gifted and talented students may benefit from social interactions with like-ability peers, although complete isolation may be detrimental to their relationships with general education students.

Bullying. Research presents mixed findings regarding whether the rate of bullying differs among gifted and nongifted peers (e.g., Campbell, 2017; Espelage & King, 2018; Estell et al., 2009; Jumper, 2009; Peters & Bain, 2011). However, it is clear that experiences of bullying can have detrimental effects among all students, with common outcomes associated with bullying including depression, anxiety, feelings of sadness and loneliness, aggression, and substance use (Evans et al., 2019; Glassner & Cho, 2018; Pelchar & Bain, 2014). Like other students, the two types of bullying that gifted students may be more prone to experiencing are name-calling and teasing (e.g., Peters & Bain, 2011; Peterson & Ray, 2006). Nevertheless, being teased due to their intellectual abilities (e.g., being called a nerd or a geek) may be relatively unique to gifted students (Kitsantas et al., 2017; Peterson & Ray, 2006). It is also important to remember that gifted and talented students can be perpetrators of bullying as well (Peters & Bain, 2011; Peterson & Ray, 2006), especially if they occupy high social status among their peers.

Data-Based Decision Making: Identifying Students With Social-Emotional and Behavioral Challenges

Considering that gifted and talented students may be overlooked for school mental health support, school psychologists and school counselors can identify these students through universal screening for social, emotional, and behavioral challenges (Eklund et al., 2015). School psychologists may lead these efforts, in conjunction with school counselors, given their extensive training in utilizing psychoeducational assessments to identify students in need of social-emotional and behavioral supports (NASP, 2020). From there, school psychologists and school counselors can conduct follow-up assessments to identify the individual needs of gifted and talented students who show profound signs of emotional, social, and behavioral distress. This is important because a gifted and talented student may report notable levels of anxiety, depression, or even externalizing problems for reasons not discussed in this particular chapter. Keeping this notion at the forefront of case conceptualization allows for comprehensive service delivery that addresses students' individual areas of need. Consequently, case conceptualization should result from a multimodal assessment, involving the use of multiple assessment techniques (rating scales, interviews, classroom observations, record reviews, etc.) and seeking input from multiple sources (caregivers, teachers, students, etc.; McConaughy & Ritter, 2008; Smith, 2007).

Social-Emotional and Behavioral Interventions

School mental health support includes multiple efforts school personnel may employ to cultivate students' social, emotional, and behavioral well-being (NASP, 2015; Suldo et al., 2014). School-based mental health support can be delivered within an MTSS framework to reduce the possibility of overlooking select groups of students, including gifted and talented learners. Universal support (or Tier 1) may include the implementation of social-emotional learning (SEL) lessons, Positive Behavioral Interventions and Supports (PBIS), and efforts to promote a positive school climate for all students (Doll et al., 2014; Macklem, 2011; NASP, 2015). Regarding the latter, for example, Peters and Bain (2011) found that rates of bullying among gifted and nongifted students were significantly different between the two schools that participated in their research. Consequently, school psychologists can collaborate with school counselors to conduct a schoolwide climate survey (see Zullig et al., 2010) to identify the strengths and areas for growth at the school or classroom level, followed by consulting with other stakeholders about how to create a supportive climate for all students. Some strategies school counselors and school psychologists could share with key stakeholders include ensuring all areas in the school are supervised during and between classes, providing opportunities for students to report and discuss their experiences, integrating the concept of bullying into the classroom curriculum, and having teachers model positive interpersonal skills for students (see Whitted & Dupper, 2005, for a more extensive review of school, classroom, and individual strategies). School counselors could also conduct focus group interviews with gifted and talented students to identify the types of bullying they are encountering (e.g., being teased because of their intellectual abilities) in an effort to be responsive to their specific needs.

(Dis)ability is conceptualized as a core aspect of human diversity that should be taken into consideration when discussing culturally responsive mental health care (Hays, 2016). In the spirit of providing culturally responsive support (Betters-Bubon et al., 2016; Jones, 2014), SEL lessons delivered at a universal level should include relevant content for gifted and talented learners. Still, due to the scarcity of research, more studies are needed to identify how SEL interventions could be adapted to reflect a level of cultural (or group) sensitivity for gifted and talented learners. For example, research led by Suldo, Shaunessy-Dedrick, et al. (2018) suggests that SEL programs delivered at the universal level could teach high-ability students how to cope with specific challenges they are likely to encounter (a brief description of an SEL program that was recently developed by their research team is described in Suldo et al., 2019). When serving gifted and talented students, school psychologists and school counselors can review SEL pro-

grams for implementation and explore ways to include targeted discussions that are most relevant for this population.

Support offered at the Tier 2 and 3 levels may include individual and small-group interventions, such as school-based counseling support (Doll et al., 2014; Macklem, 2011; NASP, 2015). Counseling support should be delivered by competent practitioners who are trained to provide mental health interventions. Based on their professional training, school psychologists and school counselors can serve in this role (ASCA, 2019; NASP, 2015). For example, Damiani (2006) identified cognitive-behavioral therapy (CBT) as a useful treatment for supporting gifted and talented students. CBT, an approach to counseling that school psychologists and school counselors are trained to provide, is an empirically supported intervention for treating internalizing and externalizing problems experienced by children, adolescents, and adults (Hofmann et al., 2012). CBT is based on the idea that one's thoughts, feelings, and behaviors are interconnected. Thus, CBT serves to mitigate debilitating thoughts that may perpetuate negative emotions and behaviors and to help clients utilize adaptive behaviors that are facilitative of their well-being (e.g., healthy social skills; see Kendall, 2011). Key components of CBT include psychoeducation (teaching clients about the nature of their challenges and learning how to manage those challenges), cognitive restructuring (replacing maladaptive thoughts with adaptive thoughts), relaxation training, problem-solving training, and social skills training (e.g., teaching students how to be assertive; Joyce-Beaulieu & Sulkowski, 2015; Kendall, 2011). Using CBT as the guiding framework, school psychologists and school counselors can help gifted and talented students identify and challenge unhealthy thoughts through cognitive restructuring (e.g., being highly concerned with mistakes) and identify ways to cope with their feelings (e.g., utilizing helpful strategies to minimize feelings of excessive worry or anxiety sparked by external pressures). To address issues with bullying at the individual level, other counseling goals grounded in CBT may include teaching bullying victims to be assertive when interacting with bullies and conducting social skills groups to promote bullies' use of prosocial behaviors (Whitted & Dupper, 2005).

Finally, interacting with peers who share similar interests and abilities is invaluable for gifted students' social and emotional development (Eddles-Hirsch et al., 2012; Kitsantas et al., 2017). School counselors and school psychologists should be intentional about linking gifted and talented students to likeminded and like-ability peers. It is important to note that this does not mean isolating gifted and talented students from their general education peers altogether because gifted and talented students may miss those interactions (Eddles-Hirsch et al., 2012; Kitsantas et al., 2017). Instead, school psychologists and school counselors can (1) help gifted and talented students identify interest facilitating activities

in the school setting, (2) create a space (e.g., social support groups) for gifted and talented students to come together and discuss their experiences, or (3) help gifted and talented students find relevant support in the local community through community asset mapping (Griffin & Farris, 2010). School counselors might also consider linking gifted and talented students to online support groups, as long as they are conscious about promoting students' safety and privacy (Joyce-Beaulieu & Parker, 2019).

Coordinated work in this domain is especially critical because school counselors and school psychologists are likely to engage in other professional responsibilities that preclude them from focusing on mental health services alone. School psychologists, for example, are likely to spend a considerable amount of their time testing students for special education services (Castillo et al., 2012), whereas school counselors' professional time may be spent completing work-related paperwork and coordinating schoolwide testing for state exams (McCarthy et al., 2010). As such, school counselors and school psychologists should develop a plan for service delivery, including a consideration of who is responsible for delivering specific support (e.g., universal SEL programs, social support groups, individual counseling), when such services will be provided, and how traditional support can be adapted to reflect a sensitivity to gifted and talented students' unique needs.

Conclusion

School counselors and school psychologists are expected to approach their work from a social justice perspective and provide school-based mental health support for all students. Bearing this call to action in mind, school counselors and school psychologists can join together to support gifted and talented students by relying upon their shared and unique areas of expertise. Because gifted students represent a heterogenous group of individuals who may experience significant strengths and weaknesses, school psychologists can help school counselors identify the needs of individual gifted and talented students, given their extensive experience with conducting psychoeducational evaluations. Subsequently, school counselors and school psychologists can work together in a collaborative manner to identify appropriate academic and social-emotional/behavioral supports for individual students. Failing to engage in cross-disciplinary work may result in gifted and talented students being underserved, especially those from minoritized backgrounds.

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SECTION VI

Counseling Needs/Interventions

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CHAPTER 36

Counseling Gifted Students: Psychological Perspectives

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Counseling psychologists, school counselors, and school psychologists represent three separate helping professions with a common purpose: nurturing the cognitive, psychological, and social-emotional development of children, adolescents, young adults, and adults. A retrospective review of 20th-century clinical practice, in particular that of Leta Stetter Hollingworth (Myers & Pace, 1986), reveals the foundation for current psychological perspectives related to the unique counseling needs and interventions with high-ability students. We build on this foundation through a focused discussion of recent advances in counseling gifted students, twice-exceptionality, and academic acceleration.

INTRODUCTION

Hollingworth (1942) corroborated Terman's[1] (1925) findings that "gifted" or high-ability students are generally well adjusted in school (and in life). From this

1 For several decades, experts in gifted education have expressed concern (Warne, 2019) related to Terman's mixed legacy. In particular, conclusions from Terman's (1925) *Genetic Studies of Genius* were based solely on a nonrepresentative sample that was predominately White and male (Keating, 1975). Furthermore, Terman was noted for overgeneralizing beyond the data. Myers and Pace (1986) stated, "Thus although Terman's studies provided considerable information on the development and characteristics of gifted children, critics have argued that his findings created a myth about these talented youngsters; that they are all well-adjusted and can get by without specialized psychological or educational services" (p. 548). We concur. Even though many high-ability students are well-adjusted, they still need attention with respect to their social-emotional and cognitive development.

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finding, one might conclude that there is little that should differentiate counseling high-ability students from counseling any other group of students. However, Myers and Pace (1986) presented six findings from Hollingworth's clinical research that support an alternative view that giftedness manifests an array of intrapersonal and interpersonal issues that are specific to this identity and tied to their unique cognitive and affective development. We recognize the relevance of both views and suggest a talent development perspective (Subotnik et al., 2011) because it (a) includes general developmental issues that all individuals experience, (b) emphasizes areas unique to high-ability students' strengths as well as potential challenges, and (c) recognizes diagnostic concerns requiring intervention (e.g., specific disorders such as anxiety, learning difficulties, behavioral or social-emotional difficulties), as well as interpersonal issues with family members, other students, or teachers.

A talent development approach requires that the psychologist or counselor understand the fundamental academic, creative, and affective issues of high ability in order to help students cultivate their talents. When professionals collaborate to ensure that the learning environment is conducive to and appreciative of intellectual, creative, and artistic pursuits, as well as when they help high-ability students understand social-emotional development relative to talent development, they are engaging in developmental counseling by focusing on students' strengths and the intersection of these areas of strengths with social-emotional development. The latter is especially important within the context of transitioning from a K–12-based development of talent (i.e., gifted programming) to issues related to college major and career choice. Within a developmental perspective, counselors and psychologists can help the student understand how career choice, as related to the individual's overall sense of well-being, may be an expression of personality type (see Sak, 2004), cultural and contextual values, and interests, rather than simply employment. Counselors and psychologists can help gifted students recognize that their individual characteristics, such as the demonstration of intellectual passion and intense emotions, can be unique strengths.

Social-Emotional Adjustment

The social-emotional adjustment of gifted students encompasses a variety of issues and the research examining this construct is vast. *Self-esteem* and *self-concept* are terms often used to indicate social-emotional adjustment. Self-concept is a construct with deep historical roots in psychology and education, which represents a "powerful system of cognitive structures that is quite likely to mediate interpretation of and response to events and behaviors directed at or involving the individ-

ual" (Nurius, 1986, p. 435). One aspect of self-concept is academic self-concept, which is how students view their academic performance and skills. There have been some debates as to whether academic self-concept is negatively impacted by academic interventions for high-ability students, such as ability grouping or acceleration (e.g., Marsh et al., 2008). This view, the big-fish-little-pond effect (BFLPE), suggests that one's academic self-concept is influenced positively or negatively depending on one's ability relative to the average abilities of the other students in the school. The BFLPE theory is related to social comparison theory, or the human tendency to compare oneself to others. These comparisons impact one's self-concept, and thus self-esteem, and vary depending on whether a person is making upward or downward comparisons (Trautwein et al., 2009).

Among students, social comparison information is consistently integrated into their academic self-concept, which has been used as an argument against grouping students based on ability. However, Preckel and colleagues (2015) found that ability grouping had neither a positive nor a negative effect on high-ability students' academic self-concept, yet there was a positive effect on their academic achievement. It may be that academic self-concept among high-ability youth is less impacted by one's reference group than among other populations of students (Dai et al., 2012; Dai & Rinn, 2008; Trautwein et al., 2009). That is, although placement into high achievement educational settings can be associated with low academic self-concept, this may not be true for high-ability youth.

Some studies have examined self-concept in relation to attending specialized programs, such as summer enrichment opportunities. In these situations, where students are exposed to peers with talent in similar domains, researchers have found no decline in academic self-concept and positive changes in other aspects of self-concept (Makel et al., 2012). Dai and colleagues (2012) found comparable results in their longitudinal study of 152 students attending a summer program for high-ability youth, where academic self-concept remained stable. However, students with lower self-esteem and female-identified students were more apt to exhibit BFLPE patterns over time.

It is also important to note that these findings cannot be applied to high-ability students of color or students with disabilities, as these populations are rarely included in investigations of self-concept. Educators know that individual differences and contextual factors influence social comparison and self-concept (Dai et al., 2012; Seaton et al., 2010). Emerging evidence suggests that high-ability students with disabilities do have differing self-concepts from those high-ability students without a disability. Specifically, Foley-Nicpon and colleagues (2012) found that high-ability students with Attention Deficit/Hyperactivity Disorder (ADHD) reported generally lower self-esteem, behavioral self-concept, and overall happiness than high-ability students without ADHD, yet their academic self-concept scores

were similar. It may be that the impact of social comparison varies depending on the intersectional identities of the high-ability student, but more research is necessary before one can make definitive conclusions or generalize these results to diverse populations of students with high ability.

It is clear that self-concept and giftedness represent complex constructs, and the study of each, as well as the relationship between the two, is made more difficult by theoretical controversies about both. In the area of gifted education, the issue of one-dimensionality versus multidimensionality has also permeated discussions of self-concept. Research lends credibility to the multidimensional nature of self-concept (see also Plucker & Stocking, 2001). In a study (Colangelo & Assouline, 1995) investigating the self-concept of 563 gifted students spanning grades 3–11, authors found support for the general notion that the overall self-concept of gifted students is positive. However, there were peaks and valleys across the grade levels and the various domains as measured by the Piers-Harris Children's Self-Concept Scale (Piers, 1994). Most importantly for counselors, educators, and administrators, the authors found:

- General self-concept scores were high for elementary, middle, and high school students; however, among the three grade levels, high school students had the lowest scores. High school female-identified students had the most significant drop in self-concept scores.
- As high-ability students progress in school, they become more anxious and feel more isolated.
- The lowest scores of the 563 students in the study were found in the domains of interpersonal skills and self-satisfaction, and the highest scores were in the domains of intellectual and school status.

In general, the empirical evidence suggests gifted students are as well-adjusted, if not more so, than their peers (referred to as the harmony hypothesis; Preckel et al., 2015), which contrasts with the counterhypothesis of lower social-emotional adjustment compared to peers (disharmony hypothesis; Preckel et al., 2015). That is, gifted students are at no greater risk of developing mental health concerns than any other student. Yet attitudes toward gifted students vary, with some educators embracing the disharmony hypothesis. For example, Preckel and colleagues (2015) asked 182 preservice teachers about their attitudes toward high-ability students in Germany and found confirmation of the disharmony hypothesis for male- but not female-identified gifted students. Results from a similar study of 262 U.S. teachers (McCoach & Siegle, 2007) revealed that overall attitudes toward gifted students were neutral; however, there were significant individual differences, and some teachers in the sample held strongly negative views against gifted students while others held strongly positive views. Additionally, training

in gifted education was not related to their attitudes toward gifted students, and special education teachers generally had worse attitudes toward gifted students than other teacher groups. Therefore, despite evidence that high-ability students demonstrate generally positive social-emotional adjustment, not all teachers perceive this to be true (Baudson & Preckel, 2016).

Social-emotional adjustment is a very relevant topic for school counselors, psychologists, and teachers because the issues focus on human interaction. In individual as well as group sessions, educators can discuss issues such as: What does it mean to have high ability, and how is this identity affected by my personality? What do I like about having high abilities? What do I not like about it? How does having a high ability intersect with the other identities I hold? What do my friends think about my abilities? What about my family? All of these questions help students explore their understanding and feelings about self, especially as they relate to their academic ability. Betts and Kercher (1999) organized a useful workbook of affective activities designed to foster academic ability within the context of greater understanding of the impact of the affective domain.

Psychological Perspectives of Achievement and Underachievement of Gifted Students

Achievement

Achievement and human motivation are often addressed within a success/failure paradigm. A well-researched cognitive model of motivation, attribution theory (attribution for success or failure), emanates from the seminal work by Weiner (1974, 1985). Such a paradigm is particularly relevant for gifted students. Using this paradigm, Assouline and colleagues (Assouline, Colangelo, et al., 2006, Assouline et al., 2020) looked at gifted students' perceptions regarding the two ends of the achievement continuum, success and failure in school, as well as in specific academic areas. Interestingly, girls and boys do not view their attributions for success and failure similarly, which suggests that educators and counselors need to take such issues into consideration when discussing course selection, career choice, and an overall approach to studying challenging topics.

Specifically, attributions for effort (the "studious" student) were more likely to be made by girls than boys (Assouline, Colangelo, et al., 2006; Assouline et al., 2020). This is not to say that boys do not recognize the role of effort in their school success (and failure), simply that they are more likely to recognize the role

of their ability and the interplay of ability and effort as it relates to success. An important finding in both studies from Assouline and colleagues was that virtually no student attributed failure to being "not smart enough," thus dispelling a myth that gifted students' effort will diminish in the face of failure to "protect" their perception of being smart (Dweck, 1986).

Underachievement

The continuum of success and failure includes points in between, specifically underachievement. On the surface, the relationship between achievement and underachievement appears to be one-dimensional—a gifted student has the potential to achieve; if the gifted student does not achieve according to potential, they are an underachiever. However, this simplistic description of the relationship does not address why some gifted students underachieve. The gifted underachiever label suggests a learner with a high level of potential that does not match the learner's observed level of achievement (Reis, 1998). At its most basic level, underachievement is a severe discrepancy between potential and achievement that persists over time and is not a direct result of a learning disability (Reis & McCoach, 2000; see also Chapter 31 by Siegle et al., this volume). The discrepancy may be between two standardized measures (e.g., IQ and achievement tests), or between a standardized measure and a measure of accomplishment (e.g., an achievement test and performance on daily assignments). The field of gifted education has long sought to understand and remediate underachievement due to valid concerns about the loss of talent among high-potential students who fail to actualize their gifts, and the negative impact on both the students themselves and society.

Most commonly, the gifted education literature has focused on global underachievement, wherein a student underperforms across multiple academic domains (e.g., McCoach & Siegle, 2003); however, underachievement may also be domain-specific, such as in math (e.g., Vlahovic-Stetic et al., 1999). Understanding individual differences in how underachievement manifests is critical in tailoring interventions to meet the individual needs of the student (Fong & Kremer, 2020). Whether general or domain-specific, underachievement has the potential to severely limit a student's academic attainment and career opportunities.

Underachievement has been explored extensively in the gifted education literature, although this problem remains an enigma for the field (Reis & McCoach, 2000). Many researchers have attempted to identify the causes of underachievement among high-ability youth. Early research focused extensively on motivation and personality characteristics (e.g., Fong & Kremer, 2020; Reis, 1998; Whitmore, 1980). This research debunked false notions that high-ability students are, by

default, motivated students, and that their level of motivation is stable over time and context. Likewise, there has been an assumption that high-ability students do not have social-emotional challenges, do not experience academic problems, and will succeed on their own without help or intervention from others (Moon, 2009; Neihart et al., 2016; Peterson, 2009). Counselors and educators now recognize that gifted and talented students experience the same range of social-emotional needs as their peers, and that many students do, in fact, require specialized instruction, interventions, and supports to meet their individual learning needs.

Moving beyond motivation and personality, research into causes of underachievement has included exploration of social-emotional issues, including anxiety and depression (e.g., Kim, 2008; McCoach & Siegle 2003; Reis & McCoach, 2000), self-regulation (e.g., Peterson, 2002; Zimmerman & Martinez-Pons, 1990), level of parental support (e.g., Reis & McCoach, 2000; Rimm, 2008), peer support (Leaper et al., 2012), the teacher-student relationship (e.g., Desmet et al., 2020), and underchallenging or uninteresting curricula (e.g., Matthews & McBee, 2007; Reis & McCoach, 2000). Additional factors that appear to contribute to underachievement are difficult transitions to middle school or high school, lack of learning skills (e.g., poor development of study skills to cope with increased academic demands), and negative self-perceptions related to academic skills (e.g., Desmet et al., 2020).

Addressing underachievement and supporting students in actualizing their potential is an essential goal of school counselors and psychologists who work with high-ability youth. At the same time, most interventions designed to reverse underachievement have had only limited success (Dowdall & Colangelo, 1982; Reis & McCoach, 2000). A meta-analysis by Steenbergen-Hu and colleagues (2020) found no evidence that underachievement interventions significantly improved the academic performance of gifted students in terms of course grades; however, some students showed qualitative improvements related to academic motivation, self-regulation, and finding school more meaningful. As the field gains a better understanding of the numerous factors that contribute to underachievement, it seems that interventions need to be tailored to the specific barriers that are affecting the individual student. As such, effective intervention would begin with an exploration of those factors.

Desmet and colleagues (2020) examined the narratives of four underachieving students to identify antecedents contributing to the onset and resolution of underachievement. Although clear themes emerged among the four students, there were also critical individual differences that, if ignored, would have led to less favorable outcomes. For example, a student who is underachieving due to lack of study skills requires a different type of intervention and learning opportunity than a student who is underachieving due to lack of access to a sufficiently

challenging and interesting curriculum. One of the key findings contributing to positive outcomes in this study was the development of personalized future educational and/or career goals that increased motivation to improve academic performance to attain those goals.

It is important to recognize unique barriers faced by students who identify as Black, indigenous, or people of color within the broader context of underachievement. These are students who often are underrepresented in gifted and talented programs (Ford, 2011; Reis et al., 1995), and they continue to experience unintentional bias in educational settings (Ford, 2011). This can interfere with accurate identification and the implementation of appropriate support. If a student's potential is not recognized, they can become "hidden underachievers" (Ford, 2011). Likewise, students who are afforded fewer educational opportunities to develop their talents may become "involuntary underachievers" (Reis & McCoach, 2000). Additionally, how achievement is defined may vary by culture. Researchers are beginning to explore the concept of underachievement outside of the Eurocentric models of achievement that currently exist (Snyder & Wormington, 2020).

Twice-Exceptionality

In 2004, the federal Individuals With Disabilities Education Act (1990) was reauthorized, and Congress added gifted and talented students who have a disability to the groups of students whose needs have priority in U.S. Department of Education grants to guide research, personnel preparation, and technical assistance. For the first time, there was federal recognition that gifted students may also have disabilities (twice-exceptional) that impede their achievement. This is an important aspect in understanding the underachievement of some gifted students; performance may be related to an undiagnosed disability. Common examples of twice-exceptionality include high-ability students who also have attention or learning disorders, autism spectrum disorder, and/or anxiety or mood disorders (see Chapter 16 by Carpenter, this volume). The experience of underachievement in this population may be due to a variety of factors, including reduced opportunities for talent development due to a central focus on the disability, direct effects of the disability that limit educational performance, the inability to cope with increasing academic demands when students are no longer able to "mask" their disability with their talents, low academic self-efficacy due to experience of challenge, negative relationships with teachers, and more. Educators may mistakenly view this underperformance as related to motivation as opposed to a diagnosed or undiagnosed disability (Brody & Mills, 1997; Neihart, 2006). As a result, twice-exceptional students are at risk for being misunderstood or mislabeled as

"lazy" or unmotivated, which can lead to disengagement from the learning process, and further underachievement.

Twice-exceptional students are at risk for underachievement because they have barriers to achieving at their level of giftedness. Such students can become easily frustrated (and frustrating) because their inability to perform or "behave" can generate questions regarding their motivation and commitment (Assouline et al., 2010). From observation, it seems dual exceptionalities are more common than most educators may think. This situation is exacerbated by the fact that experimental research has not kept pace with the need to accurately identify and recommend appropriate interventions (Foley-Nicpon et al., 2011). The inconsistency between educators' expectations about the relative rarity of twice-exceptional students and the observable fact that they exist may be accounted for by the trend of misdiagnosis (Chapter 37 by Amend and Peters, this volume; Webb et al., 2005).

A comprehensive assessment and the accurate interpretation of results are central to diagnosis, curricular programming, and social-emotional intervention. Testing is important to minimize misdiagnosis, yet many advocates for testing are at a disadvantage due to the deemphasis on ability testing in the reauthorized IDEA (Assouline & Whiteman, 2011). The issue of testing is also relevant for establishing the need for accommodations within classrooms as well as during high-stakes testing (e.g., college entrance exams). For twice-exceptional students, this may be an especially frustrating situation, as even within the professional community, there is disagreement about the right to accommodations. Also, twice-exceptional adolescents may find that they have greater dependence on their parents to advocate for them because, compared to educators, parents often are in a position of having a greater understanding of both exceptionalities, possibly due to the reality that they have greater interest and concern for their child. The professional (i.e., teacher, counselor, psychologist) must work with the parent to ensure appropriate interventions (Assouline, Foley-Nicpon, et al., 2006).

Twice-exceptional students are at heightened risk for comorbid challenges with executive functioning, anxiety, and self-concept (Assouline et al., 2010; Barber & Mueller, 2011; Doobay et al., 2014; Foley-Nicpon et al., 2011, 2012). These challenges may further contribute to underachievement, difficult behaviors, and problems with peer relationships in the school setting (Nielsen, 2002). Monitoring for these challenges and providing needed interventions is vital. At a basic level, intervening through a talent-development lens by recognizing and nurturing talent, while simultaneously accommodating or developing areas of challenge to reduce the negative impact of the disability on achievement, has been associated with more positive outcomes in twice-exceptional learners (Baum et al., 2014).

Students with anxiety or low self-concept may need support in building coping skills so they may fully engage in the learning process. Students with executive functioning deficits, who may have excellent understanding of the academic material but whose grades suffer due to incomplete assignments and poor attention to detail, would benefit from a combination of classroom accommodations and direct intervention in strategies to improve executive functioning skill. Additionally, given the risk of twice-exceptional students being misidentified and having their talents and/or disabilities go unrecognized by educators, early training in self-advocacy may provide them with the tools needed to communicate their needs to educators more effectively throughout their academic career.

Academic Acceleration

The watershed report *A Nation Deceived: How Schools Hold Back America's Brightest Students* (Colangelo et al., 2004) and its successor, *A Nation Empowered: Evidence Trumps the Excuses Holding Back America's Brightest Students* (Assouline et al., 2015), brought needed attention to the effectiveness of acceleration as an academic intervention for highly able students. Academic acceleration is an educational intervention that moves students through an educational program at a faster-than-typical rate or a younger-than-typical age (Pressey, 1949; see Chapter 28 by Lupkowski-Shoplik and Behrens, this volume). The forms of acceleration include whole-grade, single-subject, early entrance to kindergarten, early entrance to college, and Advanced Placement coursework (Southern & Jones, 2015).

However, the mythology and misunderstandings associated with academic acceleration as an educational intervention continue to impede its consistent implementation. Despite decades of robust research findings, which support the academic, psychological, and socially positive effects of acceleration (Rogers, 2015), the general belief remains, at best, ambivalent about the benefits and, at worst, negative, especially with respect to the student's social-emotional development.

School counselors and psychologists are able to contribute their expert advice about the effectiveness of acceleration as an intervention, especially relative to the social-emotional realm. Acceleration is not simply an academic accommodation. It is a key component of meeting the social-emotional needs of gifted students (Colangelo et al., 2004). Thus, it is critical for educators, counselors, and psychologists to be knowledgeable about the research and familiar with the practice of acceleration so that they can be effectively involved in the decision-making process.

The following case vignette, adapted from *A Nation Empowered* (Assouline et al., 2015), illustrates the effectiveness of acceleration as an intervention strategy for a twice-exceptional student. Allison was an intense and precocious child who began reading before age 3, but had sufficiently challenging behaviors to limit her academic progress upon beginning school. She was diagnosed with ADHD, and the initiation of stimulant treatment helped with managing her behaviors. Still, school was a struggle for Allison. She was frustrated about sitting in school and only being taught things that she had previously mastered. The question of acceleration was raised, and there was initial hesitancy given her behavioral challenges. However, her gifted and talented teacher advocated on her behalf, expressing a view that Allison's behavior may improve with more rigorous academic coursework, and citing evidence from a recent evaluation that Allison demonstrated the cognitive and academic skills to be successful at a higher grade level.

The school team agreed that Allison would skip sixth grade. Allison thrived following the acceleration, and a decision was made to further accelerate her learning in the areas of science and language arts. By high school, she was supplementing her education by taking classes online and at the community college. At the time of entering college, she had already earned two associate degrees along with her high school diploma, and she had enough college credits to enter as a junior. Acceleration was the right choice in meeting Allison's individual needs for intellectual engagement and challenge, preparing her for a successful transition to college.

College/Career Counseling and Social-Emotional Adjustment

The college and career choices of any individual are understandably related to one's interests, personality, values, cultural context, and social-emotional development. Career counseling is one of the most often requested counseling services among high-ability students and their parents (Yoo & Moon, 2006). It may stem from a desire for students to understand how their talent domains relate to career opportunities (Assouline & Colangelo, 2006), and rightly so, as any undeveloped talent is a loss to society (Csikszentmihalyi et al., 1993).

Even though gifted students tend to be more mature in the career planning process and may even articulate their career interests and goals earlier than typically developing students (Greene, 2006; Stewart, 1999), career planning for high-ability students has not always been smooth (Colangelo, 2002). On the one hand, gifted students may have the academic credentials to succeed in classes, advanced coursework, and eventually in their career; however, on the other hand,

they may not necessarily know what they want to do for the rest of their lives, nor do they have the information to plan for a career. Ability and ambition do not always translate into planned or purposeful action.

Although many gifted students have potential in multiple academic domains (Kerr & Sodano, 2003), not all high-ability students select careers that call upon their greatest talents, as their greatest interests may not align with their talent domains (Gottfredson, 2003). Additionally, longitudinal research suggests that gifted students' vocational interests strongly predict actual career choice (Perrone et al., 2010; Robertson et al., 2010). However, less is known about how these findings apply to diverse groups of high-ability students. In their mixed methods study of gifted students from economically disadvantaged backgrounds, Jung and Young (2019) found that occupational interest, enjoyment, and intellectual stimulation were associated with students' intentions to pursue an occupation and their expectations for success. The authors' findings suggest career decision making may be more complex for high-ability youth from disadvantaged backgrounds, again making salient the importance of considering multiple identities in intervention work with high-ability youth.

Summary

Research has dispelled the myth that high-ability students are not psychologically healthy. However, there are important aspects related to their overall development (academic, creative, artistic, psychological, etc.) that are best considered through the lens of talent development. For this reason, we advocate for a collaborative approach among educators and professional support personnel such as counseling psychologists, school counselors, and school psychologists. Academic interventions affect the social-emotional development of all students, and those with high ability are no exception. In particular, the academic intervention of acceleration offers a relevant area for consideration of the intersection of academics and social-emotional well-being. As well, students who are twice-exceptional (e.g., have high ability and a diagnosed learning disorder or severe social impairment) have unique learning and social-emotional needs. We also acknowledge that the K–12 environment is the pathway to postsecondary opportunities that eventually lead to career decisions. Professionals who work with high-ability students are uniquely positioned to have an impact on the students' talent development.

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CHAPTER 37

The Importance of Accurate Assessment of Gifted Students: Issues With Misdiagnosis, Missed Diagnoses, and Twice-Exceptionality

EDWARD R. AMEND AND DANIEL B. PETERS

Gifted children and adolescents may present unique characteristics when interacting with counselors or therapists. They may impress the counselor with the large vocabulary and sound reasoning common among gifted students. They may confuse others with their atypical perspectives. They may stump the therapist with deep questions or unanswerable dilemmas. They may cover up their weaknesses by using their strengths (Maddocks, 2020). Their asynchronous development is often on display, with intellect beyond their years (J. R. Cross & Cross, 2015). Their presenting behaviors may be troublesome, just like others who come to counseling.

Often, the challenge with gifted children is finding the underlying cause for those outward behaviors. When a gifted child presents to a professional who has no knowledge of gifted children, it is likely that professionals will fit the presenting behaviors or "symptoms" into a framework with which they are familiar. They are unlikely to use giftedness as a frame to explain all or part of the behavior, due to lack of experience or knowledge about giftedness and its associated characteristics. Accurate assessment is important because understanding the root cause of one's behavior is the key to identifying and applying the appropriate intervention. Throughout this chapter, italicized case vignettes are used to highlight the complexity of these issues. Some of the vignettes are original to this chapter, while others are adapted from previous works of the authors. These cases underscore the

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importance of accurate assessment and describe potential consequences of misdiagnosis of gifted individuals.

A patient walks into the physician's office and presents with a unique set of symptoms. The physician does not recognize this illness—the symptom presentation is unusual, differing in subtle ways from what she has seen before. Despite a thorough search, she cannot find information about it in the medical journals, and she hadn't heard about anything like it in medical school. She consults with colleagues and finds they have not seen this either. She realizes she is in uncharted territory and attempts to fit the patient's symptomatology into her existing knowledge, finally determining that it is close to Disorder X, but not completely. Without specific information, the physician uses her current knowledge and framework to explain the situation as best she can, and provides treatment based on that interpretation (vignette adapted from Amend and Beljan, 2009, p. 131).

The underlying cause is unclear for this patient, and the physician does the best she can to determine it along with the most appropriate intervention for the symptoms. Of course, her response would have been different if she had information about this particular presentation. Without it, she makes a reasonable decision to treat the outward presentation. When it comes to counseling gifted children, if the counselor is unfamiliar with giftedness, situations like this one can become the norm rather than the exception. Without information about giftedness and its implications, teachers and counselors working with a gifted student can only address the outward behavior with their own existing knowledge base (Hartnett et al., 2004). When giftedness is a contributing factor to the problem and this underlying issue is not identified, inappropriate interventions may be applied (T. L. Cross et al., 2020; Mullet & Rinn, 2015).

Ten-year-old Cameron is a gifted student referred to their school counselor due to problems in the classroom. They are active and restless, frequently out of their seat, and often asking questions that only slightly relate to the topic at hand. They are disruptive to the other children, constantly talking and telling others what to do. The teacher reports that Cameron will "not listen to me." Further, Cameron often does not turn in homework, stating they forgot or it was "boring." Although they do not directly state it, the school staff is concerned that Cameron's impulsivity and inattention are due to Attention Deficit/Hyperactivity Disorder (ADHD), and that the refusal to do as told may be due to oppositional defiant disorder (ODD). A meeting is called with Cameron's parents to inform them about the concerns and to describe Cameron's behavior problems. Working under the assumption that these behaviors are due to a disorder, interventions shown to be beneficial for that disorder are implemented. Cameron gets points for positive behavior (e.g., staying in seat, paying attention) and marks for negative behavior (e.g., being disruptive, straying off-task, not turning in homework). If the behavior plan does not improve the targeted behaviors, testing may be conducted to look into the possible underlying causes of the problematic behaviors.

Delaying testing may waste valuable time because accurate assessment of students with possible giftedness and/or diagnosable mental health conditions is imperative to addressing the needs appropriately (Amend, 2018; Gilman et al., 2013; Gilman & Peters, 2018; Lovecky, 2018). Gifted children come with a set of characteristics that are often unknown to typical physicians, psychologists, counselors, or educators; many professionals receive little, if any, training about the characteristics, asynchronous development, social-emotional characteristics, or special needs of gifted individuals. This scenario may explain the *inadvertent misdiagnosis* or *missed diagnosis* of gifted individuals. Well-meaning professionals—with limited or no knowledge about gifted individuals—do not have a framework from which to view the behaviors of gifted children, thus resulting in misinterpretation.

Of course, being gifted does not indicate or even imply that a child carries a psychiatric or medical diagnosis (e.g., Wilson, 2020), but, to be clear, it also does not mean that one is *exempt* from such diagnoses (e.g., Karpinski et al., 2018). Gifted children can and do experience mental health issues at least as frequently as the general population (Neihart et al., 2002, 2016). These dually diagnosed students are often referred to as twice-exceptional, or 2e. Although giftedness may contribute to behaviors that others do not recognize or understand (e.g., intense reactions or atypical interpretations), giftedness itself does not cause maladaptive behaviors. More likely, maladaptive behaviors in gifted individuals result from an individual's, a school's, or a system's inability to understand and address their own or others' giftedness. As T. L. Cross and colleagues (2020) stated, "Schools unprepared for exceptional students (gifted and/or 2e) may contribute to students' distress" (p. 6). And, when typical traits and characteristics of gifted individuals are misunderstood or misinterpreted, the behaviors may be mislabeled or the student misdiagnosed.

Failure to correctly interpret and support a gifted individual's challenges can lead to negative consequences, including, for example, missing attention problems in gifted underachievers (McCoach et al., 2020) or gifted students' hiding strengths to conform to peer expectations (J. R. Cross et al., 2019). Alternatively, when properly identified and served, giftedness can also support positive adjustment (Neihart et al., 2016), positive peer interactions and support (Oh et al., 2019), and decreased hopelessness among disadvantaged youth (Bolland et al., 2019). These studies all support the importance of accurate identification of both giftedness and/or any health or mental health concerns.

How prevalent is the problem of misdiagnosis? Although some speculate it is a widespread phenomenon, much of this position is bolstered by clinical and educational observation of those working with gifted individuals (see Webb et al., 2016, for an overview). However, some emerging research data suggest

that misdiagnosis among the gifted is a concern. For example, Mullet and Rinn (2015) concluded that misdiagnosis of giftedness and ADHD is a problem and that distinguishing between the two conditions, which may co-occur, is challenging. Bishop and Rinn (2019) used a mixed-method study to provide support for the notion that clinicians lean toward pathological or diagnostic explanations for behaviors regardless of whether high IQ is suggested as a possible explanation. Both showed some level of misunderstanding about the needs of gifted individuals. Additionally, 2e students may be overlooked because they mask or compensate for their weaknesses (Maddocks, 2020; Mullet & Rinn, 2015) or work to hide their giftedness (J. R. Cross et al., 2019). These factors make accurate assessment and identification of gifted students' educational and mental health needs more difficult.

Although limited research data exist to clearly answer the question of prevalence, the concern escalates when one understands that, in today's world, diagnosis often results in medicating a child and setting up an intervention plan based on a child's "pathology." With a focus on *what's wrong* and no time taken to understand *what's right*, addressing an individual through a gifted lens and attempting to understand its implications will not happen. When a child is misdiagnosed, inappropriate interventions, which may include medication, will likely be applied and they will not receive the benefits of appropriate interventions and accommodations that would be provided if accurate conclusions were drawn. Although there is no doubt that medication has its place in the management of behavioral and psychological disorders, and it has helped many children manage difficulties previously beyond their control, the practice is not appropriate when medication is incorrectly used to suppress the misunderstood behaviors of gifted children. School counselors who have knowledge and understanding of the special needs of gifted individuals can play a vital role with gifted children in school—from referral to intervention—to increase the chances that a gifted child is properly identified and appropriate support is provided.

The Concerns: Misdiagnosis, Missed Diagnosis, and Dual Diagnoses

As covered elsewhere in this book, gifted children have distinct characteristics that result in their different perspectives or, perhaps, behaviors. These unique presentations can lead to two clinical issues: misdiagnosis and missed diagnosis. Both result in a mismatch between a student's actual learning, health, or mental health needs and other's perceptions of those needs (Webb et al., 2016).

Misdiagnosis occurs when a gifted individual is incorrectly identified as having a disorder, such as ADHD or autism spectrum disorder. The diagnosis is incorrect because the behaviors can be better explained by giftedness rather than pathology. That is, the disorder is not present in the individual, but the diagnosis is made, leading to not only inappropriate interventions but also the lack of appropriate interventions. This is not to say that some of the behaviors consistent with the diagnosis are not present—in most cases, some are, as these behaviors prompted the initial concern and referral. However, in these cases, addressing the symptoms will be ineffective because the root cause—giftedness—is not addressed. Intervening to address the core issue of giftedness and its implications for development and behavior will yield far better results in these cases. For example, the inattentive gifted child who is not paying attention because they are not being challenged, are not engaged in the curriculum, or do not have to attend will respond much better to curriculum modifications than to behavioral interventions or stimulant medication.

Dr. Greyson enters the examination room where his next patient is waiting. The profusely sweating patient informs the physician that his left arm aches, he is short of breath, his ankles are slightly swollen, and he has chest pain characterized by a burning sensation. The physician acts on the symptoms and immediately goes into cardiac arrest treatment mode because the symptom presentation seems clear. If he does not ask questions to rule out the symptoms as being related to anything other than heart failure, he will not know that the patient ran 10 miles to the office, did 20 left arm push-ups while waiting in the examination room, and then rapidly consumed a large sandwich. Relying solely on the observable symptoms and not asking the key questions or using available diagnostic tools to rule out that the patient is having a heart attack, the medical intervention may inadvertently harm an otherwise healthy patient. Dr. Greyson is at risk for rendering an incorrect diagnosis, which may result in misapplication of otherwise appropriate interventions if he treats the patient's symptoms without considering their origin. The possibility for a negative outcome is exponentially increased (vignette adapted from Amend & Beljan, 2009, p. 137). Similarly, gifted children who are misunderstood, misdiagnosed, and treated only on the symptom level—without understanding the true causes of the behaviors of concern—are likely to resist intervention and/or fail to respond to it.

Missed diagnosis occurs when a diagnosis is indeed present, but the behaviors are minimized or excused because of giftedness or creativity. Unidentified 2e students are among this group. For example, a gifted child is described as quirky and socially awkward when, in fact, they have a diagnosable condition like autism spectrum disorder. When problems are minimized at the expense of one's giftedness, a child is not provided with the needed support. Although addressing this child's giftedness will be important and may even temporarily diminish some of

Table 37.1
Characteristics of Twice-Exceptional Learners

• Excellent expressive language skills	• Strong observational skills
• Strong reasoning skills	• Struggles with synthesizing ideas
• Uneven academic skills	• Weak organizational or study skills
• Low self-esteem; highly self-critical	• False attributions for success/failure
• Strong questioning attitudes	• Sensitivity regarding their disability
• Inordinately frustrated by school	• Grades don't match abilities

Note. Characteristics are compiled from Besnoy (2006), Mayes et al. (2018), and Trail (2011).

the problematic behaviors, the child will not reach their potential or perform at expected levels unless interventions also address the core delays associated with autism spectrum disorder, such as difficulty understanding social cues and transitioning throughout the school day. If a gifted child with ADHD is excused as an overexcitable gifted child, appropriate adaptations for academic or social problems may not be implemented. Similarly, if Dr. Greyson attributes all of the patient's problems to his run, push-ups, and sandwich, without further exploration of possible heart issues, he could miss a potentially serious condition and fail to provide the appropriate interventions.

Dual diagnosis occurs when a gifted child is appropriately identified as both gifted and as having a health or mental health disorder or disability—thus, neither misdiagnosis nor missed diagnosis is present. These dually diagnosed gifted individuals are often referred to as 2e (twice-exceptional, or multi-exceptional if more than one disorder or disability is present). The term *2e* refers most commonly to the gifted child who has one or more disability, such as a physical disability (e.g., visual or hearing impairment), a learning disability (e.g., in reading, math, or written language), or an emotional/mental disability (e.g., ADHD, depression, or autism spectrum disorder). Only with comprehensive and accurate assessment can both issues be identified (Amend, 2018; Gilman et al., 2013; Gilman & Peters, 2018). Twice-exceptional children may show characteristics such as those in Table 37.1 (Besnoy 2006; Mayes et al., 2018; Trail, 2011).

Twice-exceptional learners can be difficult to identify readily, and there are three groups that may be misdiagnosed or missed due to masking or compensatory effects (Brody & Mills, 1997; Maddocks, 2020). For one group, the strengths (giftedness) may mask the weaknesses, not allowing the disability to be identified. Difficulties in certain classes or on certain assignments may then be misattributed to motivation rather than the true disability "because the child is so bright." Common examples include the gifted child with dysgraphia or dyslexia

who appears oppositional in their refusal to write or read, even though they are actually unable to do so well enough.

A second group includes students whose weakness may mask their strength, so that giftedness is overlooked. The struggles are apparent and interventions are attempted, but the student's strengths, which may be helping to compensate for the weaknesses, are not identified. An example is a gifted child who suffers from anxiety, and thus does not perform well on tests so that strengths are not visible. When strength is not identified, interventions to only address weak areas are applied, and appropriate support for strength areas are not.

Finally, the third group is comprised of students whose gifts and limitations mask each other. The child does "fine" by teacher accounts, but shows inconsistent peaks and valleys on tasks that play to strengths or weaknesses, respectively. No interventions are applied because the students are achieving adequately or at least at grade level. Frustration is almost certain in these instances for unidentified 2e learners, and low self-esteem can result (Besnoy, 2006; Hughes, 2011; Kalbfleisch & Iguchi, 2008; Trail, 2011). For these reasons, parents report difficulties in identification of their 2e students as well as challenges getting them served appropriately (Dare & Nowicki, 2015).

With accurate assessment and identification as 2e, success is more likely, as strengths can be developed and used to help compensate for weaknesses when possible (Bracamonte, 2010), while weaknesses can be targeted appropriately for intervention. For example, when a student is identified both as gifted and having ADHD, interventions to develop talents, remediate skill weaknesses (e.g., time management or task completion), and/or manage behaviors (e.g., stay seated or decrease classroom disruption) are needed for this child to develop optimally and perform to their ability. However, due to the unusual test score patterns produced by many 2e learners, these students have a difficult time even qualifying for either special education services or gifted programming (Amend, 2018; Barnard-Brak et al., 2015; Gilman et al., 2013; Hughes, 2011). Giftedness and ADHD, for example, can be particularly difficult to identify in a gifted child, due to strong compensatory abilities and/or the presence of psychomotor overexcitability (Amend, 2018; Gates, 2009; Mika, 2006; Mullet & Rinn, 2015; Rimm, 2011), although some authors disagree with this conclusion (see, e.g., Lovecky, 2018).

Eleven-year-old Lucas is a fifth grader who absorbs information in such a way that his parents don't understand how he knows what he knows. He appears to have a photographic memory and is several years advanced in math. Although he expresses himself both verbally and in writing beyond his years, his handwriting is very difficult to read. Lucas has a vocabulary like an adult, and his parents are told he sounds like a professor when he speaks. He has obsessive interests that have included knowing all makes and models of cars, every planet and star in the solar system, every country in the

world, astrophysics, and computer coding. He has to have all tags cut out of his clothes, wears the same few shirts, and eats limited foods. At school, Lucas is frequently talking and asking questions, frustrating his teacher. His body is restless, and he distracts and annoys other students with his pencil tapping. He often reads a book under his desk or gazes out the window, seemingly deep in thought, prompting his teacher to tell him to "pay attention" and question him. To her surprise, Lucas usually knows the answer when called on. Lucas has trouble making and keeping friends, often missing social cues. He becomes fearful at bedtime when it is dark and quiet. In these instances, he finds himself being unable to think about anything other than death and what happens when one dies. He describes fearing this unknown and not wanting to leave his family or for his family to leave him. Lucas also has intense periods of sadness and hopelessness, but he cannot describe what he is sad about or why he feels this way, although he is usually fine a few hours later or the next day (vignette adapted from Peterson & Peters, 2021).

Lucas has clear, identified strengths and possibly gifted abilities. Additionally, he shows behaviors that are of concern and may prompt referral to a counselor. Attention difficulties, social challenges, and worries are evident and may need intervention, regardless of Lucas's likely gifted abilities. There are three possibilities. Based on what is known, it is possible that Lucas has a disorder that requires treatment. Perhaps some of his behaviors could be better explained by his giftedness and addressed through curriculum modifications and other interventions that address the social and emotional aspects of his giftedness. Finally, Lucas may be 2e, needing interventions to address both a disorder and his giftedness.

Complex questions about the origin of a gifted child's behaviors cannot be easily answered. Only with knowledge of giftedness can the situation be better evaluated. If a school counselor or psychologist is unfamiliar with the unique characteristics, they are more likely to end up like Dr. Greyson—inaccurately identifying causes and intervening on the wrong level.

The First Step in Accurate Assessment: Understanding Typical Referrals

What are the behaviors that get gifted children referred to a school counselor or to a mental health professional for evaluation? Are they substantially different than those of more typical children? In many cases, they are not that different. Table 37.2 shows some typical reasons gifted children get referred to school counselors or outside mental health professionals.

When one reviews Table 37.2, it becomes clear that there are many possible reasons for these behaviors. When one is able to view them with a gifted lens, pos-

Table 37.2
Reasons Gifted Students Are Referred to a Counselor or Psychologist

• Boredom with routine tasks or failure to complete homework • Attention problems; seem to be "in their own world" • Criticism of other students or of teachers • Refusal to accept authority; nonconforming • Bossiness in games or attempts to dominate others in class discussions • Limited frustration tolerance (e.g., easily angered) • Emotional overreactions (e.g., crying over minor incidents) • Personal grief due to loss (e.g., death or activities curtailed by local restrictions)*	• Reluctance to move to new topics in discussions • Frequent strong disagreements with parents, teachers, or peers • Self-criticism and impatience with failures • Joking or punning at inappropriate times; disrupting class • Lack interest in details; handing in of messy work • Underachievement; not "working up to potential" • Anxiety or worry over personal, local, or global events* • "Fear of missing out" due to social isolation or distancing measures*

Note. The three referral issues indicated by an asterisk (*) reflect the increasing anxieties anecdotally observed by clinicians working with gifted students during the COVID-19 global pandemic in 2020.

sible reasons *related to giftedness* may appear more plausible than a diagnosis; however, accurate assessment requires exploration of all possible explanations, from those associated with giftedness to those associated with health or mental health conditions, such as physical problems, ADHD, or ODD. Of course, failure to complete homework may be a sign of either ADHD or ODD, but it could also be explained by an educational mismatch due to giftedness, 2e, or an undiagnosed or masked learning disorder. However, the educational mismatch would not be found if no one thought to look because of the focus on what's wrong (Bishop & Rinn, 2019; Hartnett et al., 2004; Mullet & Rinn, 2015). A reluctance to move on to new topics could be related to a pervasive developmental delay, such as autism spectrum disorder on the one hand, or a search for deeper meaning and understanding on the other. Knowing the cause, not just the behavior, is necessary to intervene appropriately with the gifted child in school. Table 37.3 shows common referral behaviors, possible interpretations related to giftedness, possible explanations related to diagnostic conditions, and possible diagnoses.

It is easy to see how misdiagnosis and missed diagnosis can occur in gifted individuals, given the complexity of their presentations. The individual who engages in nontraditional behaviors and disrupts the status quo may not be seen as creative, but as a troublemaker. The youngster who neglects chores or parent

Table 37.3
Referral Behaviors and Characteristics of Giftedness

Behavior Causing the Referral	Possible Explanation Related to Gifted Issues	Possible Explanation Related to Diagnostic Considerations	Possible Diagnosis or Twice-Exceptionality
Boredom with routine tasks	Rapid pace of learning and mastery	Disinterest; inability to focus	Depression; ADHD
Failure to complete homework	Considers repetition unnecessary	Lack of organization; forgetfulness	ADHD; depression
Attention problem; seem to be "in their own world"	Unchallenging or underchallenging curriculum	Inattention; preoccupation of personal interest	ADHD; autism spectrum disorder
Reluctance to move to new topics in discussions	A search for deeper meaning and understanding	Difficulty with transitions or following instructions	Autism spectrum disorder; ADHD
Self-criticism and impatience with failures	Perfectionism and unwillingness to take risks	Impulsivity; worry about self; perfectionism	Anxiety; depression
Criticism of other students or of teachers	Idealism and related experience of keen disappointment	Inflated self-image; narcissism	Bipolar disorder; personality disorders
Frequent strong disagreements with parents, teachers, or peers	Cynicism or ability to see all sides of a situation	Negative self-image; dislike of social interaction; discomfort in public	Oppositional defiant disorder; autism spectrum disorder; anxiety
Refusal to accept authority; nonconforming	Strong-willed behavior or tendency to engage others in nonproductive power struggles	Negative view of others; belief that one is better than others	Oppositional defiant disorder; conduct disorder; disruptive mood dysregulation disorder; personality disorders
Joking or punning at inappropriate times	Creativity and unusual sense of humor without tact, judgment, or timing	Impulsivity; misunderstanding of social norms	ADHD; autism spectrum disorder

Table 37.3, *continued*

Behavior Causing the Referral	Possible Explanation Related to Gifted Issues	Possible Explanation Related to Diagnostic Considerations	Possible Diagnosis or Twice-Exceptionality
Bossiness in games or attempts to dominate others in class discussions	Strong but misguided attempts at leadership that appear bossy	View of self as superior to others; disregard for others' feelings	Disruptive mood dysregulation disorder; thought disorders; autism spectrum disorder
Emotional overreactions (e.g., crying over minor incidents)	Dabrowski's overexcitabilities	Fragile self-esteem; limited self-confidence; anger at self or others	Intermittent explosive disorder; anxiety; depression
Limited frustration tolerance (e.g., easily angered)	Perfectionism with self or others	Anger; impatience with perceived incompetence	Intermittent explosive disorder; oppositional defiant disorder
Lack interest in details; handing in messy work	Visual-spatial thinking style; creative license	Inattention; poor writing or comprehension skills	ADHD; learning disorder
Underachievement; not "working up to potential"	Disengagement with curriculum not meeting the student's needs	Disinterest; anhedonia; anger; fear of failure	Depression; anxiety disorder; oppositional defiant disorder
Anxiety or worry over personal, local, or global events	Emotional sensitivity; existential angst	Irrational worries; existential concerns	Anxiety disorder; depression
"Fear of missing out" due to social isolation or distancing measures	Intense emotions; reactions to close peer connections being severed	Irrational worries and fears	Adjustment disorder; anxiety disorder; depression
Personal grief due to loss (e.g., death or activities curtailed by local restrictions)	Intense emotions and deep understanding of emotions	Bereavement	Post-traumatic stress disorder; acute stress disorder; adjustment disorder

Note. This list is not inclusive of all possible disorders.

and teacher requests during periods of intense focus may be seen as self-absorbed or narcissistic, or even as having ADHD or autism spectrum disorder, when the behaviors may be explained better by a "flow" experience or the intense focus of giftedness. In either case—regardless of the best explanation—it is important not to excuse inappropriate behavior. Perhaps the intense focus of giftedness is the underlying reason for not completing chores or responding to parent requests, but that is still only an explanation. It does not excuse the inappropriate behavior, which may impact relationships or cause family problems, and intervention will be needed to promote positive interactions. Thus, when a child leaves work incomplete or is underachieving due to peer relation problems, the underlying issues will need to be addressed, rather than minimizing the behavior by saying something like, "She will be fine. She is one of the smartest in the class."

In clinical practice, the most common disorders that are subject to misdiagnosis and missed—or overlooked—diagnosis are ADHD and autism spectrum disorder (Gates, 2009; Rimm, 2011; Webb et al., 2016), and some research supports this statement (Bishop & Rinn, 2019; Hartnett et al., 2004; Mullet & Rinn, 2015). Others misdiagnosed or missed may include ODD, bipolar disorder, and learning disorders such as dyslexia (reading disability) or dysgraphia (writing disability; Webb et al., 2016). The gifted child's intensity and often-changing moods, for example, can lead one to explore disruptive mood dysregulation disorder or bipolar disorder instead of addressing the intensity as a factor of giftedness, or the presence of a psychomotor overexcitability, which may be confused with ADHD (Bishop & Rinn, 2019; Gates, 2009; Hartnett et al., 2004; Mika, 2006; Mullet & Rinn, 2015; Rimm, 2011). Comprehensive assessment that seeks to find and understand an individual's behavior—including strengths and weaknesses along with their impact on behavior, performance, and relationships—is needed to clarify the diagnostic picture (Amend, 2018; Gilman et al., 2013; Lovecky, 2004, 2008; Webb et al., 2016).

Avoiding Misdiagnosis and Missed Diagnosis: Seek Underlying Causes

There are several considerations in differentiating correct diagnoses from gifted behaviors. As noted, looking at only the surface behaviors does not take into account giftedness, any underlying root causes, or situation-specificity of behaviors. Webb et al. (2016) provided succinct lists to begin the exploration for several specific diagnoses, including potential contraindications for diagnosing certain conditions. Additionally, several authors (Bishop & Rinn, 2019; Gates, 2009; Hartnett et al., 2004; Mullet & Rinn, 2015; Rimm, 2011) described prob-

Table 37.4
Considerations in Differentiating Giftedness From Pathology

Look for early milestones or precocious development when gathering background and history.	Evaluate the child's current behaviors and their possible relation to high intellectual or creative potential.
Consider whether the individual's behavior patterns are typical for gifted children or adults.	Explore whether the "problematic" behavior patterns are greatly reduced when the person is with other gifted persons or in intellectually supportive settings.
When examining the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-5*; American Psychiatric Association, 2013) diagnostic criteria, remember to consider the child's developmental level in terms of giftedness, and whether this could account for some of the behaviors that otherwise would fit the diagnostic criteria.	Evaluate situational contributions to the difficulties. Explore the extent to which specific situations may markedly ameliorate the "problem behaviors" and consider whether the "problematic" behaviors are pervasive or situation-specific.

lems related to diagnosing ADHD instead of identifying giftedness. Two prereferral checklists have been developed for exploration of ADHD and giftedness (Lind, 1996) and Asperger's syndrome (now subsumed under autism spectrum disorder) and giftedness (Amend et al., 2009). Finally, Table 37.4 provides some general guidelines for counselors to begin to explore whether giftedness may play a role in a child's behavior. These guidelines and tools provide a framework from which to view the behaviors in order to begin to determine whether giftedness or pathology—or both—may be the most appropriate explanation.

Once the proper explanation is found, identifying appropriate interventions is clearer. Returning to the vignettes of Cameron and Lucas, it may not be surprising to learn that the behavioral interventions were ineffective. Behavior did not significantly improve; in fact, Cameron's negative behaviors escalated, and they became seen by teachers and peers as more of a behavior problem. Cameron started to hate school and began refusing to go, becoming frustrated and even feeling "stupid" and like "a failure." For Lucas, minimal behavior change was realized with targeted behavioral intervention.

After consultation and increased understanding of the characteristics of gifted children, the counselor was better equipped to intervene. Although Cameron did present with some challenging classroom behaviors that could easily be misinterpreted, the counselor recognized the signs of advanced cognitive development and an intensity and drive often seen in gifted children. She worked to alter Cameron's

daily schedule by differentiating curriculum to meet their level of ability both inside and outside the classroom. Additional evaluation was completed at the counselor's urging, and results identified strengths and weaknesses that needed to be addressed. When Cameron received a compacted curriculum with more advanced classwork and was subject accelerated in language arts, their behavior improved. Intense behaviors continued, and counseling addressed common concerns with both giftedness and attention problems. Cameron became more engaged in their schoolwork, less disruptive in class, less likely to engage in negative self-talk, and more focused on positive peer relations.

For Lucas, multiple interventions were needed to address his strengths and weaknesses. Advanced curriculum options were provided with support for his writing difficulties. Talk-to-text and other dictation options allowed him to show his strengths while minimizing the impact of his writing weaknesses. His math skills were supported by advanced work, and he progressed quickly once barriers to success were removed. Cognitive-behavioral counseling was used to address his negative and anxious moods, and social skills training with other struggling gifted students helped him develop better peer interactions. Lucas gained an understanding of his giftedness, his behavioral challenges, and their impact on his day-to-day life.

Once both Cameron and Lucas received interventions that addressed their giftedness and explored ways to minimize the impact of their challenges, their outward behaviors improved. Cameron was not formally diagnosed because appropriate intervention decreased the level of day-to-day impairment, and strengths were used to compensate for relative weaknesses. Lucas was identified as a twice-exceptional student, who will require support for both giftedness and his disability throughout his educational career. He became better able to use his strengths and became more aware of how to compensate for his weaknesses. Without comprehensive assessment and an understanding of giftedness and its implications, inappropriate interventions may have been applied, with unpredictable results.

The Costs of Misdiagnosis and Missed Diagnosis

Giftedness complicates the diagnostic picture, and the potential for misdiagnosis or missed diagnosis increases when intellect and gifted characteristics are not considered (Bishop & Rinn, 2019; Hartnett et al., 2004; Mullet & Rinn, 2015). There are many possible negative outcomes for the gifted child who is misdiagnosed with a psychiatric disorder that is not present, or when a psychi-

atric diagnosis that should be identified and treated is not. First and foremost, pathology becomes the focus, and strengths may be ignored when a psychiatric disorder is incorrectly diagnosed and treated without understanding the impact of the child's giftedness. When this happens, the child may deny their giftedness, or worse yet, begin to view the typical characteristics of a gifted child—their way of being—as pathological. What could be seen as a strength to grow may now be seen as pathology. An inaccurate label can lead a child to define themself by that label, in the same way a person with a chronic illness may inaccurately see themself as the disorder or somehow as less of a person. Focusing on what's wrong, they may no longer see what's right. Bishop and Rinn (2019) summarized additional consequences of such diagnostic errors, including unnecessary medication and limiting future job opportunities.

Second, when giftedness is denied or ignored, the gifted individual is unable to integrate it into their understanding of who they are. Without understanding the role giftedness plays in their life, they may not appreciate their intellect or the behaviors associated with giftedness. They will not use their intellect as an explanation for their behavior or as a catalyst for change. More likely, self-esteem will be negatively affected, and lack of motivation or even depression is a possible outcome. Ultimately, an opportunity is missed—there is little chance to use the knowledge about giftedness to normalize behavior, aid adjustment, increase self-acceptance, and promote resilience.

Third, misdiagnosis or missed diagnoses affect families as well as individuals. Parents learn that their child has a mental disorder, as opposed to having great potential. Maybe they learn their child is bright, but are told that their child will not be able to use their talents because of the pathology. Mental illness, real or perceived, affects a family's interactions. Interactions change and relationships transform because observations become skewed from the pathological lens due to confirmation bias. However, when a gifted lens is used to explain—but not excuse—behavior, both the individual and the family can evolve while embracing strengths and positive characteristics as opposed to (or in the case of 2e, in addition to) pathological ones. This can occur in the context of helping the child take responsibility for their behavioral expressions of giftedness rather than attributing them to pathological forces outside of individual control.

Remember that misdiagnosis and missed diagnoses not only lead to inappropriate treatment, but also decrease the chances of receiving interventions and accommodations that may help. Consider the future of a highly gifted child whose intellect is never factored into making an incorrect diagnosis of bipolar disorder. It is highly likely that the child is going to be prescribed medications with significant side effects like cognitive slowing and fatigue. Interventions to address the giftedness or educational needs may not be provided, and any cur-

riculum or program changes in the school setting are likely to address the deficits caused by the "disorder" rather than any strengths or talents the student may also possess (Amend & Beljan, 2009). Not only does the child receive treatment they may not need, but they also miss the benefit of support that may help. Finally, the implications of misdiagnosis may linger for years, by limiting health insurance options, military training, security clearance, and even volunteer opportunities for those inaccurately identified with a pathological condition. Accurate assessment through comprehensive evaluation is the best way to identify a gifted or 2e individual's needs in order to reach appropriate conclusions and develop needed interventions (Amend, 2018; Gilman et al, 2013; Lovecky, 2018).

Conclusion

Accurate assessment is important; however, reaching a diagnosis (or ruling out a diagnosis) is only a starting point—not a destination. Once accurate conclusions about a student's educational needs are determined through comprehensive assessment, appropriate interventions become clear, much the same way that the needs, rather than the label, drive the intervention on an Individual Education Program, or IEP, for a child with a mental disability or learning disability. A needs-focused approach that includes identifying strengths and weaknesses—along with strategies that address both—will provide the most useful intervention for gifted children and avoid pathologizing behaviors better explained by giftedness. Examples like Cameron and Lucas are all too common in schools. A modest amount of knowledge about gifted characteristics and an openness to seeing multiple possibilities for the cause of challenging behaviors can significantly alter a gifted individual's trajectory—both from a mental health and an educational perspective.

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CHAPTER 38

Perfectionism in Context: Empathic Gateways to a Recovery Process

THOMAS S. GREENSPON

> In my experience of it perfectionism's worst cost eludes quantification. It lies in the diminishment of my share of reality, which perfectionism starves down to a joyless, manageable minim. (Tallent, 2020, p. 53)

Perfectionism can seem like a mystery: When very few human activities can routinely be done perfectly, why would someone relentlessly push for perfection? The struggle to win or to do something outstanding is surely a part of humans' better nature; as I hope to make clear, however, perfectionism is something different. We want to help students whose perfectionism is burdensome, yet so many times our prescriptions for these students seem to have little effect or even make matters worse—what if, students might ask, the suggestions cannot be followed perfectly? Perfectionism isn't a form of psychopathology or mental disorder, although perfectionistic people can suffer greatly; it actually represents a coherent and ultimately intelligible, although self-defeating, response to a fairly profound emotional issue. Understanding the origins and psychology of perfectionism allows us to understand what is needed to help students free themselves from it. In this chapter, I will describe some of the behaviors, cognitions, and affects that typify perfectionism, and then summarize some of the crucial observational research concerning the personality characteristics of perfectionistic people. My

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approach to understanding the nature of perfectionism and the process of overcoming it, however, includes these characteristics but does not begin with them. Instead, the starting point is the lived experience of perfectionism and an understanding of its role in a person's subjective emotional world, its developmental and relational origins, and its meaning in that person's life. Taking this into account, I will suggest a way to help students and counselees launch what I refer to as a process of recovery.

Identifying Perfectionism

Perfectionism consists of a number of behaviors, thoughts, and feelings, some of which will be described here. For a fuller discussion, see Greenspon (2002). Several behaviors can be typical of perfectionistic individuals. Overcommitment is probably the most common stereotype, connoting a person who attempts to do everything and to do it all exceptionally well. Some behavioral characteristics come in two "flavors": There are perfectionists who, for example, arrive late because they have discovered and felt compelled to complete a number of tasks on their way out to an appointment or date, whereas there are others who would never dream of being late and are usually early to appointments. Procrastination can be a characteristic of perfectionism, although not all procrastinators are perfectionists. Nonetheless, some perfectionistic students are so concerned about negative feedback—as in grades less than A's—that they end up in turmoil, delaying completion of an assignment and the inevitable judgment of their work.

Certain thoughts may accompany perfectionistic behaviors. Internal "self-talk" is a part of human experience, although not always in a consciously articulated form. Such thoughts are meant as reminders to individuals about things like who they are, where they belong, and what they should or should not do. Perfectionists are frequently thinking about upcoming tasks, and about how these should be done to certain standards, perhaps even on the first try. For some perfectionistic gifted students, this results in certain activities, perhaps physical or nonacademic ones, remaining untried and off-limits. The thought of doing something poorly, even on the first try, can be enough to prevent trying at all.

Two common self-reflective thoughts are crucial in beginning to understand what perfectionism is all about: "If I goof up, something's wrong with me," and, "I'm unlikable." These thoughts underlie the burdensome nature of perfectionism, and as I will suggest, they can reveal something about its origins.

Several different emotional states can be present in perfectionistic people. Perfectionism entails a significant amount of anxiety, worry, self-criticism, and shame—the conviction that one is somehow flawed and therefore unacceptable.

The anger and impatience sometimes observed in perfectionism arises from this more fundamental emotional layer. In addition to these changing mood states, there may also be more pervasive affective patterns, reflecting more constant underlying issues. If a perfectionistic person is appearing discouraged to the point of feeling chronically hopeless and powerless, depression may be a part of the picture. If fears and anxieties have an attendant sense of paralysis, there may be an associated anxiety disorder. Overly obsessive concerns about orderliness, food intake, or procedures of living may indicate obsessive-compulsive disorder (OCD). A thorough psychological assessment is frequently needed to sort through these issues and deal with them if they are present.

Perfectionism and the Pursuit of Excellence

Unless perfectionism has led to disabling discouragement and apathy, most perfectionistic people put tremendous effort and energy into much of what they do. No effort is spared in the quest for winning, making the top grade, or getting the maximum extra credit. In reality, many people who take their tasks seriously and who enjoy doing well will exhibit this same energy and effort. This ardent and even all-consuming pursuit of excellence should be distinguished from perfectionism, even though the two may go together. The bright line distinguishing perfectionism from the pursuit of excellence is the perfectionist's anxiety about failure, or more precisely, about making mistakes. Everyone is disappointed by mistakes; a perfectionistic person may be paralyzed by them.

Research on the characteristics of perfectionism has been thoroughly summarized in at least three major works (Flett & Hewitt, 2002; Hewitt et al., 2017; Stoeber, 2018). Among the more historically transformative studies of the personality characteristics of perfectionistic people is that of Frost and colleagues (1990). Of the range of personality variables exhibited, a significant and diagnostic one was labeled "Concern Over Mistakes." As much as perfectionism is about the desire for perfection, its motive force is anxiety—the fear of mistakes, the sense of never being good enough, and the feeling of being somehow flawed and personally unacceptable. This anxiety is what makes perfectionism burdensome. In studies of outstanding people in various fields, it is consistently found that those at the very top are less likely to be perfectionistic (Burns, 1980; Sherry et al., 2010). The anxiety that universally characterizes perfectionism gets in the way of unself-conscious effort and flow. Seemingly paradoxically, performance suffers.

Perfectionists may indeed be successful; this is despite their perfectionism, however, not because of it. It is not perfectionism that determines success; it is talent, energy, and commitment—all of which would likely remain if one's perfectionism somehow vanished.

Where the pursuit of excellence is vitalizing and invites growth, perfectionism is constricting and deadening. In the extreme, perfectionism can make intimacy difficult (Haring et al., 2003), and should it combine with and contribute to underlying depression, it can lead to suicide (Blatt, 1995). It is also the case that when perfectionism is present in someone who has a diagnosis of depression, an eating disorder, or OCD, these emotional disturbances are much more difficult to treat than when perfectionism is not present (Blatt & Zuroff, 2002). In the epigraph introducing this chapter, the writer Elizabeth Tallent beautifully articulated its constricting and deadening power (Tallent, 2020, p. 44). Pointing to perfectionism's obsessive concern with pursuit of some idealized state of affairs, Tallent further said: "perfectionism is in a sense the failure to be interested in things as they are, or people as they are, the mortal loneliness of perfectionism originates in its blindness to what is right before one's eyes. . . ." (Tallent, 2020, p. 318).

The personality characteristics investigated by Frost and his colleagues resulted in an assessment tool called the Multidimensional Perfectionism Scale (Frost et al., 1990). As it happens, around the same time, Paul Hewitt and Gordon Flett also developed a Multidimensional Perfectionism Scale (Hewitt & Flett, 1991). Rather than focusing on cognitive and behavioral factors, however, the Hewitt and Flett studies concerned apparent motivational pathways of perfectionism. They proposed three facets or dimensions: self-oriented perfectionism, in which a person feels internally compelled to achieve perfection and drives themselves toward that goal; other-oriented perfectionism, in which a person feels the same internal compulsion but drives others to be perfect; and socially prescribed perfectionism, in which a person feels driven or compelled by external standards or expectations to push themselves toward perfection.

Although one may be able to categorize the findings in this way in a research context, in which one is investigating the ways different perfectionistic people tend to focus their energies and concerns, the differences may in fact be less apparent in the lived experience encountered in a clinical setting. How would one distinguish, for example, whether a socially prescribed perfectionist feels more driven by external standards or by an internal urgency to meet any supposed standards? Perhaps the internal/external distinction is a false dichotomy. Focusing attention on one or the other of these dimensions can certainly be useful as educators explore the personality characteristics that may accompany perfectionism. Speirs Neumeister and her colleagues (Speirs Neumeister, 2004a, 2004b; Speirs Neumeister & Finch, 2006) studied the relationships between the dimensions and particular achievement motivations and environmental and relational influences, for example, and Blatt (1995; Blatt & Zuroff, 2002) related the dimensions to anaclitic (relational, dependent) versus introjective (self-critical) personality formations and the implications of this for the treatment of depression. In the

lived experience of a perfectionistic person, however, such distinctions tend to represent changing momentary points of concern in a larger overall picture.

Two excellent recent collections of current research on the observable properties of perfectionism and how these relate to theoretical understandings can be found in the aforementioned works of Hewitt et al. (2017) and Stoeber (2018). Hewitt et al. (2017) made a strong case, as I do in this chapter, for the relational origins of perfectionism. Although our theoretical points of view differ, the focus of concern is on answers to why someone would be seeking perfection at all. What is perfectionism a symptom of, and what is the meaning of that symptom in the context of the ongoing historical and current subjective emotional experience of a perfectionistic person? If a mistake is seen as something that happens to everyone who tries new things, and if it is primarily a source of new learning, then it is seen simply as the pursuit of excellence. If a mistake signifies personal defect, then the stage is set for perfectionism. It is the anxiety about being defective and unacceptable that raises the emotional stakes and demands that perfection, not mere excellence, be the goal.

Is Perfectionism Ever Healthy?

The phenomenon of perfectionism can be visualized as having a *forward edge* and a *trailing edge*.[1] On the forward edge is a hope, and a longing, for acceptance by maintaining a high motivation to prove oneself and do well. This is the positive face of perfectionism, observed as high energy and high achievement. It is where all of the positive characteristics of perfectionistic people are observed, such as conscientiousness, commitment to tasks, taking work seriously, and the like. If one's understanding is limited to observations of these forward edge characteristics, the term "adaptive perfectionism" might make sense. On the trailing edge of this same phenomenon, however, are the fears that one is hopelessly defective and unacceptable. This is the negative face of perfectionism, observed as anxious overdoing, worry, and discouragement. These are the things that fuel its intensity and its sense of burden. These positive and negative aspects are not separable in any one perfectionistic person's experience; they are different aspects of the same, unitary phenomenon. These trailing edge elements, present in those people who struggle for perfection and not just excellence, are neither healthy nor adaptive, which is not to say they cannot be understood in their developmental contexts.

Although several studies have arbitrarily classified certain people as healthy or adaptive perfectionists (e.g., Parker, 1997), studies on the productivity and the lived experience of perfectionists consistently argue against such designations (Greenspon, 2008; Sherry et al., 2010). In this chapter, the emphasis is on helping

1 This concept, in a different context, is borrowed from psychoanalyst Marion Tolpin (2002).

perfectionists to utilize their talents in the pursuit of excellence, not on helping perfectionists utilize their *perfectionism* in adaptive ways.

The Origins of Perfectionism

Why would someone become afraid of making a mistake? What is the source of the anxiety about imperfection? To understand this, I begin with some concepts about basic human psychology and the developmental dynamics of psychological phenomena.

No definitive studies have established a genetic origin for perfectionism, and whatever factors might be attributed to genetic inflows would be inescapably influenced by the moment-to-moment relational interactions of the infant/adult-caregiver dyad (Beebe & Lachmann, 2014). A key personality element present in many perfectionistic people is a sense of contingent self-worth (Flett et al., 2002), which may be experienced by a child as conditional acceptance. The perceived message is that one is acceptable just as long as one continues to be successful or continues to perform to a certain standard or in certain ways. How might this arise?

My focus here is on the unique subjectivity of a perfectionistic person, rather than on externally observed symptomatic behaviors and cognitions. The question for consideration is not *how* various dispositional and characterological elements of perfectionism function, but rather *why* perfectionism occurs. The possible answers to this question rely, in this chapter, on four types of source material: (1) a half century of extensive research and scholarship in the field of psychoanalytic phenomenology—the study of the nature and structure of personal subjective experience—including the work of Stolorow and Atwood (2019), Atwood and Stolorow (2014), and Orange (1995); (2) observations from my own 4-decade-long psychotherapeutic practice helping perfectionistic individuals engage in processes of recovery; (3) examination, personally and in therapy, of my own history of perfectionism and recovery; and (4) writer and Stanford professor Elizabeth Tallent's recent book, *Scratched: A Memoir of Perfectionism* (Tallent, 2020), in which there is a movingly eloquent and illuminating account of her own perfectionism and its particular developmental dynamics.

A closer look at three important facets of human psychology—meaning, emotion, and connection—can help one understand the motivational underpinnings of perfectionism.

Human Psychology: Three Basic Elements

Human Beings Are Meaning Makers. One's subjective experience has a continuing quality of organized meaningfulness. One's personal world makes sense to each individual, allowing them to feel reassured that things are largely predictable, stable, and knowable, and allowing them to keep anxieties about powerlessness in the face of the uncontrollability of life events at bay. The maintenance of this experience of an organized world, including a sense of self as an organized, coherent unity, is a central motivational principle in human lives (Atwood & Stolorow, 2014, p. 97). When encountering new information, individuals move to fit it into their ongoing set of meanings.

One's sense of reality is structured by a set of organizing principles (Atwood & Stolorow, 2014) or emotional convictions (Orange, 1995) that shape one's particular slant on what the world is really like. These emotional convictions arise out of a formative context of essential relationships—caregivers, relatives, mentors, etc.—as individuals grow up. Cultural norms, many of which are unconscious, play a significant role as well (Layton, 2020). What sense individuals make of who they are, how they relate to others, and what the world is like develops in resonance with repeated patterns in these essential relationships. Attachment research (Sroufe et al., 2005), and microanalyses of the moment-to-moment interactions between infants and adult caregivers (Beebe & Lachmann, 2014; Stern, 2004) provide ample evidence of the process by which this occurs. Particular emotional convictions constitute humans' basic sense of reality.

Among the emotional convictions of perfectionists are such things as, "If I make a mistake, it is because I am defective," or, "Making mistakes makes me less acceptable to others." If making mistakes has such meanings, one might easily be motivated to respond by pushing for perfection. A counselor's or therapist's job is to help a particular perfectionistic person discover and put into words such prereflective emotional convictions and their possible origins, so that other options can be considered.

Human Beings Are Emotional Beings. "Emotional convictions" are just that: deeply held, emotionally colored understandings of the world in which individuals find themselves. People may not always be aware of these emotional colorings, which may be positive, as in pride or a sense of validation, or negative, as in shame or envy. Emotions are experienced, labelled, and processed—or not—according to the level of attunement of essential others in individuals' lives. When these important others support, validate, and name one's emotional states, the individual feels understood and accepted and, in addition, their very experience of themselves becomes coherent, organized, and secure. They feel *agentic*—like the authors of their own lives. Self-esteem is high. Absence or diminished levels

of such attunement bring, in extreme cases, the threat of emotional disorganization and relational disconnection (Atwood & Stolorow, 2014, pp. 228–231), with their attendant anxieties. Whatever its source, one response to such a state is to create a "defensive self-ideal" (Atwood & Stolorow, 2014, p. 230), in which perfectionistic striving is the key to banishing shameful imperfection, securing relational acceptance, and soothing the anxiety. Such strivings provide a sense of agency, even though in pursuit of an unrealizable goal. The task in counseling is to help recognize, name, and validate feelings of anxiety, aloneness, inadequacy, and shame, and to wonder together what the contextual sources of these feelings might be.

Human Beings Are Social Animals. Humans are not big enough, strong enough, or fast enough to survive their evolutionary past without banding together into cooperative groups. Human infants cannot survive alone. They form empathic bonds with others, based on their capacity to "get" one another; the motivational power of these bonds, and their vitalizing effects, remains needed throughout their lives. Emotional health and well-being are crucially dependent on human experiences of belonging, of being important to someone, and of being loved for who they are.

If a perfectionistic person has the emotional conviction of being unacceptable to others—of being alone in their struggles—the motivation to make themselves perfect again becomes clear. This part of a counselor or therapist's work is to build an empathic connection, recognizing this desire for belonging, in which a perfectionistic person can feel more acceptable, more understandable, and more normal. How do these and other related, commonly experienced emotional convictions arise?

Perfectionism in Context

Perfectionism is a self-esteem issue. Such issues, like other psychological constellations, arise in particular relationship contexts, not on their own within one person's isolated mind (Atwood & Stolorow, 2014, pp. 152–188; Stolorow & Atwood, 2019, pp. 57–70). This means perfectionism reflects the particular meanings a person ascribes to ongoing relationships with significant others in their world. Other people might draw different conclusions from the same relationships; if counselors are to help a perfectionistic person, however, they will need to understand their particular perspective.[2]

It is known that mothers develop relationships with their infants even before birth; once a child is born, the baby's mother, father, and/or other adult caregivers

2 One example of empirical support for this relational perspective on the development of perfectionism can be found in Speirs Neumeister & Finch (2006).

are set to form the first ongoing empathic bonds from which the baby establishes in time an experience of self-coherence, meaning, stability, and personal belonging. As time goes on, other individuals close to the child may form significant relationships from which a particular understanding of the world arises. Gender, race, religion, and culture all play highly significant contextual roles. The child learns what it takes to be with others in their world, what is expected, and how important they are to others. What kinds of environments might give rise to perfectionism? Although it is possible to imagine a parent simply modeling perfectionism for a child, such a learning process would most likely be fueled not by simple behavioral learning, but by an emotional undercurrent of anxiety the child might sense from the intensity of the parent's concerns about being right. What children respond to in such a situation is not so much what they see; it is rather the sometimes vague yet ominous emotional atmosphere in which one cannot seem to be good enough.

Several developmental environments might give rise to perfectionism, reinforcing the necessity of a thorough examination of developmental histories. For example:

- Families in which judgments and critiques are frequently voiced risk raising a child who pursues perfection to avoid judgment and to feel securely acceptable.
- Families in which there is a push-pull, or "yes, but . . ." dynamic, where the constant message is, "This is OK, but you could have done better," risk raising children who believe they can never be good enough.
- Families in which parents or other adults chronically complete tasks a child undertakes may be giving the message that there is a right and a wrong way to do things, and the child is always wrong.
- Families in which high performance is the norm, in which there is a culture of achievement, may be generally quite affirming and supportive yet leave doubts in some children's minds about whether the acceptance would still be there if performance should falter.
- Parents and teachers may make pointed comments when a straight-A student makes a poor grade, such as "What happened to you?" The student may infer that even momentary poor performance is a sign of personal defect.
- Many adult children from dysfunctional families, in which chemical dependency, rage, abuse, or neglect were factors, recognize their perfectionism as having arisen from attempts to be the family star who makes everyone happy. In many such cases, perfectionism also reflects an investment of energy in activities that keep the child's focus outside of the family and away from potentially disabling emotional turmoil.

- Traumatic loss during childhood development, a parent's death or divorce, or a continuing sense of rejection may spur perfectionistic strivings. My personal story is one example of this: At age 5 and a half, it was the death of my mother and a resulting silent emotional void at home that propelled my own perfectionistic strivings, in search of a stable, predictable world in which I could have some sense of agency and recognition, and in which I could also channel my attention away from grief and the shame of being the kid whose mother had died. For Elizabeth Tallent, a similar quest began much earlier with her mother's refusal to accept her at birth because of imperfections on her skin—hence her book's title and an enduring search for self-worth and empathic connection. As with all human trauma, it is not the event itself, but whether the event has an empathic "relational home" (Stolorow, 2007) in which it can be metabolized, that determines the emotional outcome.

Every person is unique, with their own story, but perfectionism can be seen in large measure as an understandable, if frequently self-defeating, struggle to gain personal acceptability and to mitigate feelings of shame at not seeming to measure up. It can become a hoped-for means of repair, and it can be a distraction, although at a cost, from these feelings of shame and loss. Here is how Tallent expressed it: "Perfectionism is a form of *being terrified of*, and what follows that *of* is a blank every perfectionist would probably fill in differently, but whose large, generalizing term may be *loss*" (Tallent, 2020, pp. 42–43). In addition to fears that significant connections are forever lost, some perfectionistic people may be motivated by a threatened loss of the deeper sense of coherence and self-unity mentioned previously. Perfectionistic striving may in this case represent the kind of purposefulness and goal direction needed to maintain this sense of personal unity. These more serious motivational issues will require a more extended, in-depth therapy for their resolution.

The Performance Standard. Many of the relationship environments described here include a performance standard, with the assumption, implicit or explicit, that the child is acceptable as long as the standard is being met. When students have the conviction that their worth is measured by how well they do, the result can be extreme internal pressure to do well, overwrought frustration when things don't go well, and possibly profound discouragement and withdrawal if the burden becomes overwhelming.[3]

Cultural Context. The focus of this chapter is on the particulars of interpersonal relations. It is crucial to recognize, however, that these relationships occur in

3 It may be that a gifted student's subjective emotional convictions and anxieties related to performance-based self-worth explain more of Dweck's (2006/2016) findings than the more purely cognitive fixed-intelligence mindset does (Greenspon, 2010).

a larger cultural context, which in the contemporary western world can be characterized as competitive, acquisitive, and individualistic (Cushman, 2019). A "winner take all" societal attitude easily becomes a prime motivator of perfectionistic striving, as does the significant anxiety experienced by BIPOC (black, indigenous, and people of color) individuals and families attempting to cope with the current manifestations of racism in the United States and Canada.

Although the cultural Zeitgeist will not be changed in the consulting room, its presence should be a part of one's awareness when attempting to understand perfectionism. The psychological ramifications of this largely unacknowledged cultural climate are explored in depth by, among others, Layton (2020) and Cushman (2019).

Is Perfectionism a Normal Part of Giftedness? One adequately conducted study on the question of whether perfectionism is more likely to occur in the gifted population, by Parker and Mills (1996), indicated that it is not (Greenspon & Speirs Neumeister, 2008). Varying definitions of giftedness and of perfectionism, inadequate sample sizes, and other design difficulties keep other studies from being definitive. Beyond this, it is hard to imagine any theory of the origins of perfectionism that would apply only to gifted individuals. Gifted children's intense, goal-directed efforts have been described as perfectionistic in nature (Silverman, 1998), but these qualities have already been summarized here as simply the pursuit of excellence or, in some cases, the forward edge of a more complex phenomenon. There are indeed circumstances under which giftedness may contribute to perfectionism:

- If a student is highly intelligent, the pressure to satisfy perfectionistic strivings is likely to be more intense in school, where students spend a large portion of their daily lives and where high achievement is within reach.
- Some gifted students come from families in which expectations and even demands are high, and where the message is that one is acceptable as long as one does well.
- Perfectionism may intensify in a student whose self-experience as a gifted person seems vulnerable (Greenspon, 2010). The student's emotional conviction might be that if they makes mistakes, people will not believe they are gifted. In essence, they are perfectionistic because their self-identity is at stake.
- Contextual factors affecting emotional development include events in the world beyond the family (Cushman, 2019; Layton, 2020). Some gifted students are very thoughtful, highly emotional, and profoundly tuned into and moved by events in their world and in the world at large. As this chapter is being written, the COVID-19 pandemic brings with it a sense of impending catastrophe, with an unclear future. At the same time, fol-

> lowing the death of George Floyd at the hands of police, the United States is in a period of increased openness about, and reaction to, serious historic and current racial inequities, including those related to COVID-19 susceptibility. Add these issues to ongoing concerns about climate change, the potentially destructive power of social media, and other world events, and these are the kinds of existential concerns that fuel significant anxieties in some gifted students, both Black and White. These issues can be determinative contextual factors in any observed anxiety states. Perfectionism may intensify in these and similar circumstances, as an attempted hedge against loss of a sense of agency, and perhaps as a distraction from feelings of anxiety and hopelessness as well.

In summary, although perfectionism is not a necessary part of giftedness, the nature of a particular gifted student's emotional world, including its social and political contexts, is clearly important to explore when perfectionism is in fact present.

Getting Beyond Perfectionism: A Recovery Process

Given the description of perfectionism and its relational, contextual origins, what approaches are most helpful in counseling perfectionistic students? Several things should be kept in mind when considering answers to this question.

First, perfectionism is understood to be a self-esteem issue reflecting emotional convictions about what one must do to hope for wholeness and acceptance as a person. It is not a simple set of irrational beliefs that can be changed by deciding to think differently. There is too much at stake emotionally. Overcoming perfectionism is a process of changing one's sense of reality. It is a recovery process, more like planting a flower than like fixing a broken object.

Second, school counselors and teachers, as well as clergy persons, scout masters, coaches, and other adults who may be vital to a child's development, nevertheless have only so much power, from positions outside of the intimate family circle, to influence self-esteem and self-view. The influence can be profound and seminal, for sure, but recovery from perfectionism in young people will usually require enlisting the support of parents and/or other significant, full-time adult caregivers. Depending on the student's actual history, especially if it includes emotional trauma, it is also important to be aware that recovery may require long-term therapeutic work to be successful, in part because a significant grieving process may be involved in addition to the evolution of revised emotional convictions.

Third, viewing perfectionism as a relational phenomenon is not meant to imply that someone is "to blame" for it. Infant or child and parent bring their differing subjectivities together in a coordinated dance, in which each affects the other, and in which each assesses the other's intentions in ways that may or may not be in agreement. Parents do what they do on the basis of their own emotional convictions, and children react to this and learn lessons from it. The issue is not "Who did this to you?" but "How did we get to this place?", and then, of course, "How do we get beyond it?"

Finally, it should be emphasized again that in cases where the issues under discussion here have resulted in serious problems for the student, a competent assessment for depression, anxiety disorders, or other psychological issues should be a part of the picture. Neglecting this could not only undermine efforts to help with perfectionism, but might also endanger the student's general emotional well-being.

With all of this in mind, I will describe four building blocks essential to the construction of what I call an *environment of acceptance*. Counselors and teachers (and parents) can make significant contributions to this in ways I will lay out. Ultimately, an environment of acceptance allows participants to interact with one another in new ways that alter expectations and meanings. Relationships improve and self-esteem rises. With this as a framework, other interventions, including prescribed challenges to certain behaviors and beliefs, can be more successful. The following elements are not in any specific order, but all contribute to the process of change.

Ingredients for Building an Environment of Acceptance

Empathy

Helping someone to change, whether the central theme is perfectionism or any other psychological formation, is a process that begins best with some understanding of meanings. A counselor observes that a student is perfectionistic. What is the meaning of such a symptom in the context of this particular student's life? What are the motive forces underlying what the counselor sees? What does the world look like to the student? Gaining this understanding is done by a process of *empathic exploration*, in which one hopes to learn to see the world through another person's eyes. There is no magical way to do this. It is a process of dialogue, in which guesses are made and discarded, depending on whether they seem

to resonate. An attitude of curiosity and humility is essential. This in itself can be understood as an antiperfectionistic process: Mistakes simply lead to other avenues of exploration.

A counselor might begin this dialogue by questioning what they see:

- "It looks like you are struggling to get started on this project. What goes through your mind when you sit down to begin?"
- "You seem really frustrated when your grade is less than perfect, even if it's the best grade in the class. Can you tell me why that is so upsetting?"
- "It seems like it's hard for you to let others participate in group projects. Does it seem like they won't do well enough?"

These questions are not meant to constitute a grilling, which of course would put any student on the defensive and would put a perfectionistic student into an anxious state about something they apparently aren't doing right. In an atmosphere of joint inquiry, answers to these questions can lead to speculations about what the student might be afraid of about making mistakes, and what expectations people seem to have. If this goes well, the counselor will learn something useful about the student's world. More importantly, the student can begin to feel understood and worth listening to, which might launch a recovery of self-esteem.

The approach suggested here is based on a particular focus concerning the nature of perfectionism. Rather than pathologizing it as a spontaneously arising emotional disorder, in this phenomenological approach perfectionism is contextualized as a symptom whose meaning within the ongoing subjective relational world of the perfectionistic person is to be sought out and brought into reflective awareness.

It is also important to keep in mind that perfectionistic strivings can be seen as a hopeful attempt to gain a secure place in the human community. The psychoanalyst Marion Tolpin (2002) referred to such attempts as the fragile "tendrils" of a forward edge movement. The student wishes to be accepted; care should be taken not to treat the strivings as alien signs of underlying pathology. The student is a person, not a disease; the counselor's job is to help make sense of the student's experience and to recognize that even a self-defeating behavior can reflect a desire for health.

Encouragement

The encouragement process involves pointing out to people the things someone likes or appreciates about them. Although this is simple enough on the surface, there are some important guidelines to keep in mind about this kind of intervention. What is said must be authentic—referring to real qualities and not

made up as "feel-good" statements. Perfectionistic students may give counselors plenty to go on. Many times these students are persistent, take their work seriously, and work hard; quality is important to them, they apply their intelligence to the work they do, and they do listen to criticism. Perfectionists may well overdo things in all of these areas, but the qualities themselves are nonetheless important and worth commenting on.

Notice that each of these observations and many others like them have something to do with personal qualities of the student, not with their performance. The encouragement process is not about how well a person does at something; encouraging comments are not doled out for good behavior. It is terrific when a student makes a top grade, and it is worth celebrating that, but self-esteem rests on how acceptable a person feels regardless of how well they do. Simply rewarding good performance risks conflating performance and personal worth. Encouragement separates the two. For example:

- "I'm really impressed with the energy you put into this project!"
- "It must have taken a huge amount of work and persistence to get this information organized and on paper!"

Again, these and similar statements are meant to be self-esteem-building comments; they help students to feel acceptable as they are, separate from how well they might perform. In fact, they help to build an emotional platform consisting of self-acceptance and reduced anxiety, which might well lead to improvements in performance after all.

It is indeed worth celebrating a student's success when they have done well. It is also worth openly emphasizing to that student, especially when perfectionism is part of the picture, that an educator would be just as impressed with them (or a parent would love them just as much) if they happened not to perform as well. An example of the power of the encouragement process and empathic understanding can be found in the story for young readers about a little girl, her mom, and her perfectionistic friend in Trudy Ludwig's book *Too Perfect* (2009).

Self-Reflection

Personality is not a static group of traits arising within a person and enduring under all circumstances. It has its origins in relational networks as individuals grow and develop, and it can be fluid and changing, within limits, depending on the nature of ongoing relationships. I have described the ways in which significant relationships contribute to the origins of perfectionism. Once prereflective emotional convictions begin to structure personal experience, relationships tend to be understood in certain ways even if other people would have a different perspec-

tive. As a part of the recovery process, it is important for parents, teachers, counselors, and others to be aware of ways they may, even unintentionally, contribute to a student's perfectionism.

A frequent way this issue comes up in counseling is when a student is given some sort of prescriptive program meant to alter or eliminate perfectionism. Under these circumstances, the implication is that something is wrong, and that there is a right way and a wrong way to correct it. The perfectionism is pathologized, rather than contextualized. The result is often a reengaging of the student's conviction that perfection is the route to acceptance.

This needn't lead to a perfectionistic worry on the counselor's part about doing or saying the wrong thing. What's called for here is not a cookbook recipe for the correct way to produce change. Instead, I am suggesting an attitude that change is possible, and that it will come about through a process of dialogue that deepens understanding and fosters a conjoint search for potential solutions. New things, including new interventions, can be tried on an experimental basis. A discussion of differing perspectives on what is "good enough," and on other people's contributions to the situation, creates a sense of joint problem solving. Both participants become trusted allies, and there is a sense of mutual acceptance.

The Counselor's Own Perfectionism. It is entirely possible that self-reflection on the counselor's part will reveal perfectionism as a part of their own makeup, as it was for me. If this is true, the counselor should begin by understanding that this might give them a unique entree into a student's recovery process. Imagine saying to a student, "I watch you struggle with ways to get started on an assignment, and I think I see myself at your age. I know I was afraid that whatever way I started out, I would be overlooking something really important. Might this be how you feel? If not, what kinds of things keep you from starting?" In this way, the counselor is speaking to the student from within their own world, as someone who understands there is a problem, who may have found a way to deal with it, and who is willing to look at the situation as a problem to be solved, not as a defect to be repaired. The dialogue that can result from this can be very powerful—for both parties.

Questions for Student Self-Reflection. In addition to the counselor giving consideration to their role in a student's perfectionism, there are some questions students can be encouraged to ask themselves as well:

- What does a mistake mean to you?
- Do you get anxious about the possibility of making mistakes?
- Do you ever learn from mistakes?
- Does making a mistake mean something is wrong with you?
- What is your self-view? Is it positive . . . negative?
- How do you think others view you? Is their view positive . . . negative?

- What do your parents (or other adult caregivers) think of you? What do they expect from you?
- What positive parts of you wouldn't go away if your perfectionism vanished?

This process serves a dual purpose: As the student considers these questions in the context of joint self-reflection, a deepening self-understanding begins to develop, as does the empathic vision and bond between participants.

Dialogue

The process of recovery from perfectionism begins in a conversation about change. The dialogue referred to here is an ongoing process that is the engine of that change. Talking together about what mistakes mean, what people's expectations are, why being less-than-perfect is scary, and whatever else comes up in relation to these topics, accomplishes multiple goals. It allows counselors, teachers, or parents to begin to discover what thoughts and feelings motivate this particular student's perfectionism. It allows for suggestions and agreements on what new approaches might be most useful, and these can be tried on an experimental basis for a period of time and reevaluated. The dialogue also becomes in itself an act of bonding and, therefore, an act of acceptance. If the student feels important enough to the counselor to be a participant in this kind of mutual exploration, then a likely conclusion is that the student is acceptable as a person.

As a dialogue becomes established, and as a joint exploration begins to bring emotional convictions under more conscious scrutiny, there are many resources for the kinds of interventions that may be tried. Some examples include Adelson and Wilson (2021), Adderholdt and Goldberg (1999), Basco (1999), and Greenspon (2002, 2007, 2012). A current review of the more cognitive and behavioral approaches is found in Egan and Shafran (2018).

In depth, long-term therapy is frequently the best means of launching a recovery process of any sort. A sustaining therapeutic alliance with an empathic, trusted partner in dialogue is for many the effective way to gain understanding of the meaning of perfectionistic impulses and to develop the capacity to see oneself in a more compassionate and flexible way. For me, for Elizabeth Tallent, and for many of the people I have had the honor of having in my consulting room for psychotherapy over the years, such therapeutic work has been essential.

One more aspect of the recovery process is important to note here: As is true for most journeys of emotional growth and change, perfectionism may not be something that can be completely eliminated in one's life. While writing this chapter, I continued to feel the urge to reread and reconsider each word and sen-

tence, and to worry about how else I might express things to get them just right. As Tallent (2020) put it in *Scratched*, "there are days I can live without the radiant book this one has failed, over and over, to be, the ravishing book now absolutely beyond reach, because it's become this one instead" (p. 487). Perfectionism may not disappear entirely from one's life, but it can indeed significantly lose its grip. In the end, this can be good enough.

Concluding Comment

The psychoanalyst Alfred Adler viewed the effort to overcome obstacles and improve life, individually and societally, as fundamental to human nature. He spoke of striving for superiority, overcoming feelings of inferiority (Greenspon, 2000, pp. 15–16). His colleague and North American spokesperson, Rudolf Dreikurs, warned specifically of the debilitating effects of perfectionism (Terner & Pew, 1978, pp. 288–289). He explored the encouragement process, and his goal in doing this neatly summarizes what I have attempted to lay out in this chapter: Dreikurs wished for all people to have the "courage to be imperfect."

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CHAPTER 39

Moving Toward and Going Through: Counseling Gifted Students With Mental Health Concerns

SUSANNAH M. WOOD AND CAROL KLOSE SMITH

> As with any other population, when social and emotional concerns interfere with schoolwork, relationships, or well-being, they warrant the attention of helping professionals. (Peterson, 2018b, p. 141)

The concerns outlined by Peterson (2018b) include but are not limited to anxiety, depression, and the experience of traumatic events, which can contribute to both types of mental health conditions. The Centers for Disease Control and Prevention (CDC, n.d.) reported that diagnoses of depression and anxiety in children and adolescents have increased in the past 20 years. More than 70% of children ages 3 to 17 who have been diagnosed with depression also have anxiety (CDC, n.d.). The Anxiety and Depression Association of America (n.d.) reported that a little more than a quarter of children between 13 and 18 have anxiety disorders. Data from the National Institute of Mental Health (2017) indicate that 2.3 million adolescents between 12 to 17 years of age have experienced at least one major depressive episode, and 71% of those were severely impaired by it. However, none of these agencies gather information that would determine how many of these children and adolescents would be considered gifted and talented, which leaves researchers and clinicians to speculate.

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Findings from what research exists regarding depression and anxiety in gifted and talented students paints an incomplete picture. Authors within gifted education suggest that gifted and high-ability students are no more at risk for anxiety or depression than their nongifted chronological peers (Neihart, 1999, 2002), and in some cases suggest that high IQ can act as a protective factor against depression (Missett, 2013). Conclusions drawn from these studies must be measured against their limitations, including lack of large-scale comparison studies with more diverse and representative samples, standardized definitions of giftedness, consistent use of assessment tools and scores, and more statistically rigorous methodologies (Martin et al., 2010). What scholars seem to agree upon however, is that gifted and talented students' "precipitating or impacting factors may be related to their nonnormality" and could play a role in anxiety and depression (Cross & Cross, 2015, p. 163). In other words, characteristics of giftedness such as heightened sensitivity, intensity, and asynchronous development "may intensify factors contributing to any of these challenges as well as how they are experienced by gifted students" (Peterson, 2018b, p. 141). The purpose of this chapter is to provide an overview of the mood disorders of anxiety and depression and their interrelationship with trauma. In addition, authors recommend different approaches and interventions for working with gifted students who may experience anxiety and depression.

Anxiety

The anxiety disorders overall are marked by excessive fear and anxiety (American Psychiatric Association [APA], 2013). Fear is the emotional response to a perceived or anticipated threat, and is associated with the fight-or-flight response and thoughts of escape and immediate danger. Anxiety, on the other hand, is focused upon future threat and is connected to muscle tension, vigilance, and avoidant behaviors. Certainly there is significant overlap between the two concepts. Anxiety disorders differ from one another based upon the types of objects or situations that trigger a response. Anxiety disorders include: separation anxiety disorder, selective mutism, specific phobias, social anxiety disorder, panic disorder, and generalized anxiety disorder.

Children and adolescents who are anxious appear to be nervous or "on edge," express unfounded or unrealistic fears, have trouble separating from parents, and often have sleep disturbances (Hazen et al., 2011). In addition, they may express somatic symptoms of trembling, sweating, shortness of breath, stomachaches, headaches, and/or muscle tension. For the school professional, students with anx-

iety may be more likely to miss school due to these described symptoms as well as a reluctance to leave parents or their home.

Depression

The common feature of depression is "the presence of sad, empty or irritable mood, accompanied by somatic and cognitive changes" for at least 2 weeks in duration (APA, 2013, p. 155). Symptoms of depression may include changes in appetite, changes in sleep patterns, loss of energy, loss of pleasurable feelings in nearly all activities, feelings of worthlessness and/or guilt, reduced concentration or marked increase of indecisiveness, and recurrent thoughts of death or suicide. In addition, children may experience persistent sadness or irritability, frequent vague nonspecific physical complaints, increased anger or hostility, and/or reckless behavior. This may result in more frequent absences from school, reduced school performance, and deteriorating social relationships (Stark et al., 2017).

Research findings on the prevalence of the symptoms of depression among gifted students have yielded mixed results. Some studies have demonstrated that gifted adolescents have fewer symptoms of depression (Mueller, 2009), and anxiety (Francis et al., 2016; Martin et al., 2010) compared to their nongifted peers. Other authors suggest that gifted students may be at unique risk for some types of depression and anxiety, such as bipolar disorder, but caution against any assumptions that "mental disorders and giftedness are necessarily linked without being clear about which disorder and which form of giftedness are measured" (Missett, 2013, p. 54). Gifted students have various temperaments, traits, overexcitabilities, and developmental patterns, and they all combine and manifest uniquely. That being said, specific traits, such as intensity and sensitivity, as well as unique developmental patterns, like asynchronous development, may lend themselves to a gifted student's experience with anxiety or depression.

Added Complexities: Overexcitabilities and Environments

Overexcitabilities

Humans' nervous systems react to stimuli both in their internal world and in the external environment around them. This stimulation can be viewed as excitability. All humans have this experience, but how they react to specific stimuli

and what stimuli they react to are unique to each individual. Each person has a different threshold of reaction. Gifted students have more intense reactions to both their internal and external worlds. They demonstrate heightened intensity or *overexcitability* with regard to "both the volume and the variety of experiences" (Probst & Piechowski, 2012, p. 55) in a way that is "over and above average intensity, duration, and frequency" (Dabrowski & Piechowski, 1977, p. 31). Gifted students may manifest both high levels of energy and the ability to focus or concentrate (Lovecky, 1994).

The concept of overexcitabilities was first introduced by the Polish psychiatrist Kazimierz Dabrowski as a component of his theory of positive disintegration. The five types of overexcitabilities (intellectual, emotional, imaginational, psychomotor, sensual) play a unique role in the life span and talent development process. On the one hand, the degree to which gifted students think and feel intensely may create feelings of doubt, depression, anxiety, disillusionment, and even questioning of one's purpose in life. However, these reactions are also the sources of galvanizing energy that can propel individuals to higher levels of development and growth. Peterson (2018a) noted that growth and advanced development typically require struggle. Although all five unique overexcitabilities suggested by Dabrowski (1972) may play a role in a gifted student's experience with anxiety, intellectual and emotional overexcitabilities may be the most pertinent when considering anxiety and depression.

A gifted student with an intellectual overexcitability could demonstrate intensive intellectual activity, including divergent thinking, questioning, problem solving, forming new concepts or connecting across concepts, reflective thinking, observing and analyzing, and a desire for precision and detail (Lovecky, 1994; Probst & Piechowski, 2012). Intellectual overexcitability "involves a need to understand and comprehend the complex and unfathomable, and a predisposition to highly active thinking patterns" (Harrison & Van Haneghan, 2011, p. 672). Although it would appear on the surface that these are all desirable abilities, they also come with their own challenges. Understanding abstract ideas, asking critical questions, as well as having the desire to *know* can result in awareness of existential concerns at an early age. Gifted students often ask questions about the concepts of mortality, the meaning of life, their specific purpose and function in life, social justice, equity, fairness, morality, spirituality, and the role of rules and authority (Neihart, 2012; Peterson, 2018a; Probst & Piechowski, 2012; Silverman, 1993). According to Peterson (2018a),"Young gifted children may also seriously consider how world governments, or families, or learning, or intercultural relationships, or peer behavior *ought* to be. Gifted adolescents likely also ponder the real versus the ideal" (p. 35). The discrepancies between what is and what ought to be are experienced and can engender disappointment, disillusionment, and despair.

Advanced cognitive development is also related to high emotional sensitivity. Gifted students with emotional overexcitabilities feel more deeply, have a more expansive range of emotions, and have high levels of identification with and empathy for other people's feelings, compassion, and the ability to form strong relationships (Probst & Piechowski, 2012). However, this gift also comes with the challenges of physical manifestations of emotions through stomachaches, strong affective responses and expressions that may seem off-putting to peers and adults, and feelings of shame and guilt, especially in environments in which the expression of emotion is discouraged (Probst & Piechowski, 2012). Harrison and Van Haneghan (2011) suggested that the combination of both emotional and intellectual overexcitability may be "a catalyst for existential depression in gifted individuals of any age" (p. 674).

Asynchronous Development

The intellectual development of gifted students may far outpace their ability to cope emotionally with what their brains are processing, an experience known as one form of asynchronous development (Silverman, 2012). Family members and educators are frequently stunned by emotional outbursts by gifted students because it is assumed that the student's intellectual abilities would preclude these. Although an 8-year-old student may have a 15-year-old mind and an advanced verbal precocity that makes them sound like a college student, they are still only 8. For these students, "cognitive and emotional responses may not be in sync when they ponder catastrophes, illness and death of people close to them, parental deployment or unemployment, parents' separation and divorce, sudden relocation, or conflict and violence at home" (Peterson, 2018a, p. 35). Although they may be able to process these events rapidly and complexly on an intellectual level, they still struggle on an emotional level, just like everyone else (Peterson, 2018a). Parents and educators alike may see emotional outbursts of frustration in gifted children who can hear a piece of music or see a piece of art and wish to replicate it only to find small hands and still-developing fine motor skills cannot capture what they see or hear in their mind's eye. Gifted students may become overwhelmed with the emotional ramifications of social inequities or environmental disasters, both globally and closer to home, because they feel powerless to stop, prevent, or ameliorate them (Cross & Cross, 2015; Neihart, 2012).

School Environment

However, not every factor that can result in anxiety or depression lies within the gifted student. Environmental factors and interpersonal relationships play a role as well. Perhaps the biggest area of concern is the school environment—student fit. Much research has been dedicated to examining gifted students' experiences in K–12 schools and the challenges that many of them face there. Perhaps among the most discussed is the lack of fit between the gifted child and the academic curriculum. Boredom as a result of unnecessary busywork, reteaching struggling students, task repetition, wait time, and unstimulating or watered-down curriculum is a frequent complaint:

> Being required, as a child or adult, to spend each day in a boring setting from which there is no escape could lead anyone to become depressed. The difference for the gifted individual is that every other person in that setting may be adequately challenged and stimulated; only the gifted individual suffers. (Cross & Cross, 2015, p. 169)

As a result, gifted students may choose to not complete homework but produce high scores on tests, selectively choose what assignments they will or will not finish, or simply opt out of academics completely—behaviors all signifying the biggest concern of educators, underachievement. Toxic relationships with educators, poor school climate, bullying, and lack of potential peers with similar interests or abilities can result in both poor academic performance and a lack of connection with the school. Gifted students in schools that do not attend to both their academic and "relatedness needs" (Cross et al., 2018, p. 123) may be at risk for anxiety and depression.

However, anxiety and depression may be a byproduct of the pressure to achieve. Gifted students who appear motivated and engaged, and who perform at high levels of academic achievement, may have learned to hide their struggles. Typically, the student who is "doing well" is not the student with whom educators are concerned given other pressing student needs. Anxiety, debilitating forms of perfectionism, the burden of perceived unrealistic expectations others have for them, and high levels of self-criticism may be operating in the background for these achievers, but the forms of achievement themselves (e.g., awards, high grade point average, first place in competitions) can mask these disturbances. Gifted students may curtail their degree of risk-taking in challenging situations (academic or other) if their anxiety leads them to conclude their grades or other achievements may suffer if they can't guarantee "the A" or a perfect performance

(Cross & Cross, 2015). Other students may overcommit or demonstrate "extreme involvement" (Peterson, 2012, p. 444) to projects, people, and service, which only heightens the anxiety of trying to do everything and do it well (Cross & Cross, 2015; Peterson et al., 2009). And, perhaps the most disturbing, gifted students may not ask for help even when they have reached a crisis level.

Describing some of the findings from her prior studies on trauma, bullying, and conflict, Peterson (2018a) summarized: "anxiety, distress, depression, and suicidal ideation were typically rarely, if ever, discussed with teachers, and not telling parents was also common" (pp. 38–39). This may be done because students fear disappointing others who expect them to "have it all together" or disappointing themselves because they believe their achievement, effort, and ability should enable them to cope successfully (Jackson & Peterson, 2003; Peterson, 2018a). Last, gifted students may not engage in help-seeking behaviors if they perceive those who provide help, such as school counselors, are only there to help "other kids" (Peterson, 2003, p. 64).

Counseling Approaches and Interventions

In 2012 Maureen Neihart provided a series of suggestions for professionals to utilize when working with anxiety and depression that their gifted students experience. The following sections will review these as well as expand on specific suggestions. We will conclude with the importance of overall physiological wellness and the necessity of a healthy and safe therapeutic environment and counselor-client relationship.

Working With Anxiety

Neihart (2012) suggested that the following interventions could address anxiety in the life of gifted student: (a) learning and practicing diaphragmatic breathing; (b) learning and practicing progressive relaxation techniques; (c) facilitating the student's exposure to people, things, and situations that create the anxiety; and (d) utilizing and evaluating information about these situations and people. The idea of "moving towards the things that scare us" (Neihart, 2012, p. 619) is particularly resonant. We also suggest exploring mindfulness and using psychoeducational approaches in order to reduce the anxiety that stems from that forward movement.

Mindfulness. Utilizing both breathwork and progressive relaxation techniques can enable gifted students to move toward or lean into feelings of anxiety more effectively. In fact, both techniques are components commonly found

in mindfulness. Mindfulness derives from Buddhist spiritual practices (Hanh, 1976) and focuses on an individual's openness to experience and their ability to self-regulate their attention to that experience and to attend from a stance of curiosity, compassion, and nonjudgement (Bishop et al., 2004; Kabat-Zinn, 2003; Sharp et al., 2017). Within the field of psychology, mindfulness "has been adopted as an approach for increasing awareness and responding skillfully to mental processes that contribute to emotional distress and maladaptive behavior" (Bishop et al., 2004, p. 230). The practice of mindfulness has gained traction in K–12 educational settings. Recent research suggests that these practices hold potential for fostering resilience to stress (Zenner et al., 2014), and positive outcomes related to depressive and anxiety-related symptoms (Kallapiran et al., 2015). The use of mindfulness by gifted individuals is a new avenue for research inquiry; however, preliminary studies suggest that gifted students may benefit from mindfulness practices (Doss & Bloom, 2018; Haberlin & O'Grady, 2018; Turanzas et al., 2020) as they emphasize metacognition (Bishop et al., 2004) and emotional awareness and regulation (Hill & Updegraff, 2012).

Bishop et al. (2004) suggested that humans are consistently measuring "what is" against "what is desired," and the discrepancy between the two yields negative affective states, such as fear or anger. Individuals set goals to decrease these states and to reduce the discrepancies they encounter. However, when they cannot reduce discrepancies or the pain experienced as a result of them, they ruminate on the discrepancy (Bishop et al., 2004). Rumination (anticipating and planning for worst-case scenarios, dwelling on negative characteristics or thoughts) generally plays a role in both anxiety and depression. Mindfulness approaches emphasize the fluidity, subjectivity, and momentary nature of thoughts instead (Bishop et al., 2004). Practitioners of mindfulness are trained to become aware of their thoughts and observe them without rendering judgement as to whether the thought is "bad" or "good" or "useful." The same is true for the experience of emotion. Emotions change every moment and are not bad or good, even if they are labeled as such; they simply are. Gifted students who practice mindfulness would be encouraged to be aware of and observe, but not react to, their emotion (Hill & Updegraff, 2012). Hence students may become more aware of their emotions over time and better able to regulate them. Mindfulness approaches also stress compassion toward self and others. Neff (2003) defined self-compassion as involving:

> being touched by and open to one's own suffering, not avoiding or disconnecting from it, generating the desire to alleviate one's suffering and to heal oneself with kindness. Self-compassion also involves offering nonjudgmental understanding to one's pain,

> inadequacies and failures, so that one's experience is seen as part of the larger human experience. (p. 87)

In their study on the relationships between self-compassion, anxiety, and depression in a nonclinical sample of adolescents, Muris et al. (2016) found that lower symptom levels were correlated with higher levels of self-compassion. If mindfulness can help gifted students become more aware of thoughts pertaining to their own self-expectations and the anxiety that can result, then practicing self-compassion may help gifted students work through those thoughts and the accompanying emotion.

Sharp et al. (2017) proposed integrating student strengths into mindfulness-based practices through specific reflective activities such as journaling. As an example, Sharp et al. suggested a journaling activity that is designed to help gifted students shift their thoughts from perfectionism into a sense of balance. Questions that facilitate that exploration include:

> In what ways does my perfectionism serve me? What character strengths am I using when I am demanding high standards of myself? Am I bringing a character strength forth too strongly (overusing it)? If yes, how might my signature strengths help me bring balance? Am I underusing any of my best qualities—my signature strengths? How might I enhance these qualities or use them in a different way that I typically do? (Sharp et al., 2017, pp. 138–139)

Psychoeducation. As Neihart (2012) explained, "Knowledge is power, and when students understand how anxious feelings grow and shrink, they are empowered to work with it rather than against it" (p. 619). Given their advanced cognitive abilities, gifted students may find that accessing and being in their minds is easier than working in the emotional realm. More information about a scary situation may mean more understanding and thus more perceived control. Emily Kircher-Morris, a mental health counselor who works with gifted students and host of The Neurodiversity Podcast, provided an excellent illustration of this (Kircher-Morris, 2019). One of her younger clients was scared of open water and was concerned about his upcoming family trip, which would provide him access to both a lake and a swimming pool. Together they explored the differences in the type of water and discussed how swimming pools were required to have chlorine, which would prevent any critters or bacteria from surviving in the water. "Logicking through" this fear through a more scientific approach helped reduce this young gifted student's fear (Kircher-Morris, 2019).

However, a word of caution is warranted here on the interaction between anxiety and Internet usage. In the information age, the Internet provides an overwhelming amount of easily accessible information with varying degrees of accuracy in reporting. Students have access to newsfeeds, opinion articles, personal blogs, and other venues, and require guidance in evaluating what is useful and accurate information versus someone's personal thought that is "going viral" via a social media platform. Additionally, for those individuals who have been diagnosed with social anxiety, their relationship with computer usage may become complicated. On the one hand, the Internet can be a great way to maintain connection and communicate with those with whom there is an existing relationship. On the other, when an individual is socially isolated and seeks to fulfill all of their interpersonal needs online, unhealthy or problematic use is more likely (Lee & Stapinski, 2012). This idea purports that some individuals with problematic Internet usage may have a preexisting mental health concern and points to the need for assessment from a mental health provider.

Working With Depression

Often when working with individuals who are depressed there is a question about how this occurred. For many suffering from depression there is a belief that an event can trigger depression. However, the general empirical consensus in the field is that the etiology of depression is a combination of environmental, biological, and cognitive factors (Stark et al., 2017). Evidenced-based treatments are widely available for child and/or adolescent onset of depression. These treatment protocols are generally categorized into cognitive behavioral therapy, individual interpersonal interventions, and individual behavioral activation (Stark et al., 2017). The following section focuses on the universal therapeutic techniques that are often incorporated into work with depressed children and adolescents regardless of therapeutic orientation or treatment strategy. These components are found in most of the evidence-based programs.

Psychoeducation. Almost all evidence-based strategies involve learning about the client's or student's depressive disorder and its implications. Parents are included in this part of the process to assist in facilitating the process of therapy and encouraging the child or adolescent to participate in as many of their regular activities as possible. Gaining an understanding of depression and how it specifically manifests in one's child or adolescent is an important part of the process.

Self-Awareness and Symptom Monitoring. Another important component for those with depression is becoming more aware of the self and monitoring depressive symptoms. A cornerstone in the beginning stages of recovery is the creation of a space in which to focus on the self and relate that experience in a

safe therapeutic environment. Mindfulness encourages the examination of self, and assists in the identification of feelings. Counseling assists with monitoring feelings, facilitating self-disclosure of affective states, monitoring symptoms, and encouraging self-reflection (Stark et al., 2017). However, an individual who is depressed will often report they lack physical or emotional energy to make changes. Thus, clients may not complete therapeutic homework and other tasks outside of sessions, such as symptom monitoring. Fatigue can be conceptualized as a problem to be solved. Similarly to fatigue, children will experience anger or irritability as their primary emotional state. Tracking moods, talking about triggers and coping responses, and elevating awareness of choices on behaviors when irritable can lead to improvements over time.

Problem Solving. Learning new and alternative methods for coping skills to manage stressors that are within the child's or adolescent's control is a common approach within many evidence-based depression treatment programs (Stark et al., 2017). Counseling and interpersonal therapy can promote the exploration of social functioning, adaptation of new skills, and interpersonal problem solving (Stark et al., 2017). Often individuals who have been diagnosed with depression will not problem solve effectively or believe that problem solving will work. If a child or adolescent is stuck in their approach to a problem, it may be useful to them to evaluate how effectively a strategy will work. Helping professionals can provide time and space for students to rehearse new skills and approaches, as well as imagery to envision the desired outcome of the use of the new skill. Changing undesirable situations and successfully solving problems can lead to increased self-efficacy and improvement in the child's or adolescent's life.

Cognitive Restructuring. Developed primarily from cognitive behavioral approaches, cognitive restructuring helps the child or adolescent explore the negative thoughts that may contribute to ongoing depressive symptoms. Individuals who experience depression often have cognitions that are not accurate but reflect a negative worldview. For example, for a child who has the negative thought "I screw everything up," the counselor would help the child identify times when this was not the case or help them find evidence to the contrary. Professionals can facilitate cognitive restructuring by helping students identify the absolutist, irrational, or unhelpful nature of specific thoughts, and assist in refuting them or creating counterarguments.

Supportive Others. Experiencing depression can result in students withdrawing not only from formerly pleasurable activities but from relationships as well. Improving communication and interpersonal relationships is often a goal of counseling. Students can benefit from professionals who help reinforce their support network by having them map people, agencies, or organizations that are meaningful and helpful to them. Parents are encouraged to discuss with their

child their role to support their child's therapeutic goals. Identification of supportive relationships is also a key component in helping students work through traumatic experiences.

Trauma

Adverse Childhood Experiences (ACEs)

Nearly half of all children in the United States under the age of 17 have experienced at least one adverse childhood experience (ACE; Crouch et al., 2019). Adverse childhood experiences include child abuse, neglect, sexual abuse, and household dysfunction, which includes having a parent with substance abuse issues, mental health problems, witnessing interpersonal violence, separation from a parent due to death, incarceration, or divorce (Felitti et al., 1998). Felitti et al.'s (1998) seminal work found a relationship between adverse childhood experiences and later poor health outcomes in adulthood, including early death. More recent investigations have examined the influence of ACEs upon educational outcomes. Most notably for educators, students who have experienced trauma may struggle with executive functioning skills, impediments to social-emotional functioning, and the inability to concentrate or access and store memories (Bethell et al., 2014). On measures of school success, students with ACE scores of 4 or more were more likely to be absent from school, be less engaged in school, to experience lower school performance, and/or to repeat a grade (Crouch et al., 2019).

Generally, assessment of trauma begins with understanding the presentation of symptoms. For individuals who have experienced childhood trauma or toxic stress, the symptoms will drive their diagnosis, and therefore a wide variety of diagnoses are possible for individuals who have experienced childhood trauma, including the diagnoses of depression and anxiety. The challenge is that in the cases of abuse and neglect, children often do not confide in others about their experiences. Children in these situations frequently do not meet criteria for the diagnosis of post-traumatic stress disorder. Instead they are given a wide array of diagnoses, such as oppositional defiant disorder, which means "this kid will not listen to me," or disruptive mood dysregulation disorder, which means "this kid has uncontrollable temper tantrums." Often children who are experiencing trauma may have up to six different diagnoses before they reach the age of 18 (van der Kolk, 2014). However, a consistent profile does emerge for children who have experienced ACEs. They often have a persistent problem with emotional dysregulation, problems with attention and memory, and challenges in getting along with others (van der Kolk, 2014).

What is unknown at this time is specifically how ACEs influence the development of gifted and talented students. The closest examination of this topic was conducted by Peterson et al. (2009) who used mixed methods to examine negative life events of gifted students. The negative life events only explored a portion of the traditional ACEs questions, such as changes in family and family dysfunction. The participants were not directly asked about neglect or abuse. The gifted participants in this study reported that their largest stressors in their lives were academic challenges, school transitions, peer relationships, and overcommitment. Notably, gifted students, like their peers, frequently did not communicate their distress to adults. Signs of distress among gifted students were seen as a high number of absences and lower academic achievement (Peterson et al., 2009). Given the prevalence rates of ACEs in the general population, more research is clearly needed to explore ACEs and gifted students.

Research on childhood trauma has demonstrated a link between traumatic stress and children's brain development (Carrion & Wong, 2012). Children who have been exposed to trauma react to their environment in a different way. When a child's stress response has been activated, the amygdala sends a message to the hypothalamus, which initiates the child's flight, fight, or freeze mechanism. This is the body's way to respond to a perceived threat to enhance survival. When a child is exposed to trauma, their stress response is constantly activated, which is oversensitized to constantly scan and react to the smallest signal as a threat. This constant physiological hyperarousal can change brain structure (Carrion & Wong, 2012; van der Kolk, 2014). Carrion and Wong (2012) examined memory function among students who had high ACEs scores compared to those who did not. These researchers found decreases in the right and left hippocampus activity during a memory retrieval task. Compared to children without trauma, those who had experienced trauma had reduced total brain tissue, reduced total cerebral gray volume, and decreases in left inferior prefrontal gray volume. The prefrontal cortex is the part of the brain associated with memory, emotional reasoning, attention, and response inhibition, all of which contribute to learning and classroom functioning. Reductions in brain volume here would result in children's decreased ability in these areas. However, the brain is resilient. Neuroplasticity is the brain's ability to change in response to stimuli, and these changes can occur throughout one's lifespan (van der Kolk, 2014). Given the right conditions, the impact of adverse childhood experiences can be mitigated.

Working With Trauma in Gifted Populations

Safety and Therapeutic Relationship. Jean Peterson (2012, 2015, 2018a, 2018b) has suggested that creating a safe and authentic climate for the helping

relationship is essential when working with gifted students. This is even more pronounced when working with gifted students who may have experienced a trauma. It has been posited that trauma among the gifted may require special care because the characteristics of the gifted student may contribute to an increased intensity of self-reflection and embracing positive disintegration of self (Dabrowski & Piechowski, 1977; Daniels & Piechowski, 2009; Peterson, 2014). In addition, Peterson (2014) cautioned that understanding the "internal world of gifted children, teens and adults is essential for effective therapeutic work, and 'therapeutic rupture' can occur when any helping professional does not consider the salience of giftedness" (p. 315). The core of recovery from trauma is self-awareness (van der Kolk, 2014). Facilitation of a students' self-awareness cannot be done without a student-counselor relationship marked by trust that is built in a safe space protected by confidentiality (Peterson, 2014). Without the ability to trust, students cannot begin the process of recovery and remain locked into survival mode.

Psychoeducation. Providing education about trauma, its impact, and the neurobiological model of how stress influences behavior can be important for self-understanding. Access to this information can help students better understand how they typically respond in stressful situations. Self-understanding is key in decreasing feelings of being overwhelmed and increasing students' awareness of the wide array of choices about how they wish to react and behave. As Peterson (2014) pointed out, using a strength-based approach and supporting gifted students' learning and understanding about themselves can contribute to identity development, which can assist them in their recovery from trauma.

One quick way to explain the neurobiological model of stress response to a student is to use the "Hand Model of the Brain" (van der Kolk, 2014). The benefit of this metaphor is that it can be simplified for the very young child or made more complicated depending upon the developmental level of the client. Basically, the helping professional holds up one hand. The hand represents the brain with the wrist as the brain stem. The thumb rests in the palm and represents the student's limbic system. The fingers are the prefrontal cortex. When everything is going smoothly, and the student is thinking, learning and interacting in a positive manner, the hand is a fist. Everything is working together. In this state, the student remains emotionally and behaviorally regulated. However, when the helping professional removes fingers from touching the thumb, they are signaling that things are not going well and the student's stress response is triggered. These are times in which the student is dysregulated emotionally or behaviorally. Their limbic system is on high alert and is not communicating with the prefrontal cortex. So the student is now reacting from their fight, flight, and freeze response. When a student operates from this automatic response, they need time to calm down

before an adult can help them talk through what happened. Only in a calm state can a child learn the most efficiently and analyze their reactions.

Grounding. Body awareness puts a person in touch with their inner self (Wheeler, 2007). Simply noticing affect is a part of this process. This process involves the student giving themselves permission to experience and note bodily sensations (changes to slight shifts in body posture, fluctuations in breathing, etc.) and then attend to changes in thought that result from these sensations. Grounding techniques also help by focusing the student's attention on the "here and now" and hopefully away from the "then and there" (Wheeler, 2007). One example of a grounding exercise is the 5-4-3-2-1 technique. A helping professional might ask the student: "What are the 5 things you can see? What are 4 things you can feel? What are 3 things you can hear? What are the 2 things you can smell? And what is the 1 thing you can taste?" These questions help the student to reorient to being in their bodies in the present moment.

Relaxation. There are many various types of relaxation strategies that students can learn to help them cope with being triggered. For a child or adolescent who has experienced trauma, learning these strategies *before* they have been triggered is essential. The challenge is finding a way to do this that engages the child. Often relaxation strategies are not seen as fun by students and adolescents, and practice is often avoided. Using technology in the form of an app for monitoring heart rate and respiration can be a nice change of pace for learning about their relaxed state and recognizing when they are experiencing stress.

Emotional Regulation. Emotional regulation refers to the process by which individuals influence which emotions they have, when they have them, and how they experience and express their feelings (Webb et al., 2012). Emotional regulation involves self-awareness of how actions trigger emotions and how to modulate responses triggered by emotion. This natural process may be dysregulated in those individuals who have experienced trauma. The goal is to find space between the triggering event and response so an individual has the option of making new or different choices instead of an automated response. Interventions for developing emotional regulation involve delayed response time, increasing emotional vocabulary, reappraisal, self-soothing, and attentional control (Webb et al., 2012).

Trauma Narrative. Talk therapy is most likely the one intervention most associated with the trauma recovery process. Unfortunately, it is not as simple as talking about the trauma. Often trauma defies one's ability to use language to describe the experience (van der Kolk, 2014). Yet it is through self-reflection and the use of language that the silence can be broken surrounding one's experiences and the most egregious wounds can heal. Creating a narrative piece by piece in a safe relationship is a key part of recovery, and has been the cornerstone of counseling for decades (van der Kolk, 2014).

Working With Anxiety, Depression, and Trauma: General Considerations

Although much of this chapter has focused upon diagnosable mental health issues, the ongoing stresses of daily living experienced by gifted and talented youth can be challenging as well. Society has artificially placed treatment of physical illness and mental health as separate and distinct entities (Barden et al., 2015). Yet, research continues to demonstrate that there is a mind-body connection, through which the mind can influence health and health can influence the mind. Taking a holistic approach to life and embracing wellness bridges this gap (Myers & Sweeney, 2008).

Physiology and Wellness

The mind-body connection has received significant attention in recent decades. Overall wellness and self-care can assist in mitigating the impact of mental health issues (Myers & Sweeney, 2008). One recommendation is to engage in self-care strategies focusing on nutrition, exercise, and sleep. As Neihart (2012) suggested, the simple steps of monitoring caffeine intake, sugar use, and increase in protein consumption can help students understand how these nutrients affect body and brain function. Students who are overcommitted to both school and activities may forego the very sleep and exercise that help the body cope with stress. Often it is self-care that is sacrificed first when an individual is experiencing life's challenges.

Counselor/Client Relationship

Based on her own clinical experiences as a counselor and her research as a counselor educator, Jean Peterson (2012, 2015, 2018a, 2018b) suggested several important guidelines for helping professionals to consider when working with gifted students, which we have synthesized here. Regardless of what symptoms gifted students display or the diagnoses assigned, counselors should: (a) be attuned to their own biases and assumptions around giftedness, talent, and ability, as these biases may cloud their ability to forge a trusting therapeutic relationship with their gifted clients; (b) recognize that many adults in the student's life may see the student as the sum of their achievements/performance and that the gifted student is a whole human, albeit "a work in progress," who needs the adult to see beyond the performance/achievement part of their identity (see Chapter 26

by Peterson, this volume); (c) utilize and model the fundamental and foundational humanistic and developmental building blocks of counseling, including respect, genuineness, nonjudgement, and unconditional positive regard, which is vital for gifted students who may be the harshest critics of themselves; (d) adapt a stance of curiosity, openness, and compassion, which demonstrates that the helping professional makes no assumptions, is interested in learning about their gifted clients' lives, practices empathic listening, and utilizes firm but gentle challenges when necessary; and (e) recognize that gifted students conceptualize and wrestle with the existential "big issues" earlier than their nongifted peers, and hence, they require a counselor who can effectively help them explore life's meaning and purpose. Although family members and educators may have important input, the therapeutic goals (what they want to accomplish in counseling) established must be the student's own or else there is a greater likelihood they will not complete them.

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CHAPTER 40

Suicide and Students With Gifts and Talents: Advice for Counselors

TRACY L. CROSS, JENNIFER RIEDL CROSS, AND LORI ANDERSEN

There is no event that brings greater sadness to a school than the death of a member of the school community. The death of a child by suicide is a great tragedy that leaves the entire community wondering why this young person chose to end their own life. Loved ones left behind may ask themselves why they did not see the warning signs or take sufficient action. In this chapter, suicidal behaviors, potential causes, and warning signs of suicide will be reviewed, with particular focus on how these may be different for students with gifts and talents (SWGT) than for students in the general population. This chapter explores the following questions: Are SWGT at higher risk for suicide? What can counselors do to reduce the risk of suicidal behavior among SWGT?

SUICIDAL BEHAVIOR IN CONTEXT

As death certificates do not contain information about giftedness, and definitions of giftedness vary between locales, differentiating suicide rates between SWGT and students in the general population is impossible. The current state of knowledge indicates that the unique characteristics of students in the general population do not translate to increased suicidal behavior among this group (Martin et al., 2010; Neihart, 1999). Multiple studies have found no significant differ-

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ences in rates of depression or suicidal thinking between academically gifted and nongifted high school students (Martin et al., 2010). Neihart (2012) cited studies that indicate a higher prevalence of psychological disorders, including depression and suicide, among creatively gifted artists and writers. She suggested that counselors should not expect students with an interest in these domains to have such disorders, but should be aware that it may be a greater possibility. Neihart further cautioned,

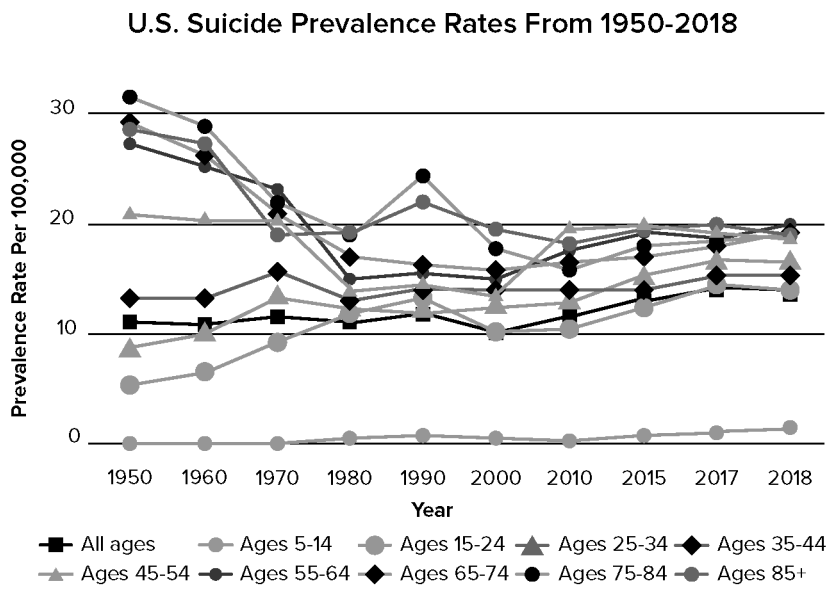
> Counselors should be prepared to consult with teachers, parents, and students regarding strategies for managing mood while engaged in intensive pursuit of high achievement in these domains (Neihart, 2008). Additionally, counselors should have in their referral network professionals who can diagnose serious mood problems and differentiate gifted creative thought from serious disturbance. (p. 625)

Studies of suicidality in gifted populations (Cassady & Cross, 2006; T. L. Cross et al., 2006) provide insight into how SWGT and students in the general population compare in their thinking about suicide. In-depth investigations into completed suicides, called psychological autopsies, have provided detailed views into the lives of adolescent SWGT who completed suicide (Bell et al., 2010; T. L. Cross et al., 1996, 2002, 2020; Hyatt, 2010). Although there are unique aspects of suicidal behavior among SWGT, which will be discussed later, the lack of evidence for differences from the norm suggests that any examination should begin with an understanding of suicidal behaviors in the general population.

Terms and Definitions

Suicidality refers to all suicide-related behaviors and thoughts, including three categories of behaviors: suicidal ideation, suicide attempt, and suicide completion. *Suicidal ideation* is the act of thinking about killing oneself. People who think about killing themselves are called *ideators*. Any actions taken with the intent to kill oneself that result in failure, regardless of severity, are referred to as *suicide attempts*, and those who engage in them are *attempters*. The behaviors that result in death of the attempter are called *suicide completions*. Those who die by suicide are called *completers* by suicidologists (O'Carroll et al., 1996).

Figure 40.1 *Trends in U.S. Suicide Prevalence by Age Group*



Note. Information from Centers for Disease Control and Prevention, National Center for Injury Prevention and Control (2005).

National Data on Suicidal Behaviors

To make comparisons of suicidal behavior between age groups or over time, suicidologists use prevalence rates rather than the actual number of completions. The large differences between the number of members in the various age groups mean that comparisons of the numbers of completions can mask differences in rate among populations. For example, the total number of suicide completions in 2017 was 6,252 for ages 15 to 24, which is higher than the 2,648 completions for ages 75 to 84 (Kochanek et al., 2019). However, the comparative prevalence rates for the two groups are 14.5 and 18.0 respectively. The prevalence rate is a better indicator of the likelihood of a member of a specific group to complete suicide; therefore, prevalence rate has more meaning when making comparisons. The past 10 years have seen increases in the suicide rate for all age groups, including the 15 to 24 age group (see Figure 40.1). The data reported are likely to be lower than the true prevalence rates for suicide. The accuracy of this information depends on the reports of cause of death; these numbers are likely underestimates of suicide completions due to misreporting of cause of death for reasons such as social stigma or insurance rules (Xu et al., 2010). Data for attempts and ideations are

not known for the entire population, and the wide range of behaviors within these categories further complicates attempts to study them. For example, a suicide ideation can range from a fleeting thought of killing oneself to persistent suicidal thoughts leading to the making of an actual plan to kill oneself. The more severe and pervasive the ideation, the greater the likelihood of a later suicide attempt (Bridge et al., 2006).

It is important to note that suicidal ideation often occurs in some form before an attempt or a completion takes place. Pinto et al. (1997) found that 85% of attempters expressed ideation before the attempt. There are many times more people who think about suicide than who attempt or complete. There are people who do not go further than thinking about suicide, but there are also those who ideate and then have a failed attempt. Some will stop after failed attempts. A smaller number ideate and then complete. It is rare for someone to experience all three categories of behavior. However, someone who has exhibited suicidal behavior in the past is at 50 to 100 times greater risk for future suicidal behaviors compared to the general population; 0.5%–1.0% of attempters later complete suicide (Bridge et al., 2006).

Suicide Among Children and Adolescents

Suicide is relatively rare among children and adolescents. It is possible that a counselor could have an entire career without ever experiencing the loss of a student at their school by suicide. However, suicide ranks as the second leading cause of death among adolescents in the United States (National Institute of Mental Health [NIMH], 2020). In 2018, 6,211 people ages 15–24 years and 596 people ages 10–14 years died by suicide (NIMH, 2020; see Figure 40.1). For each of these young people who complete suicide, it is estimated that there are anywhere from 25 to as many as 200 more unsuccessful attempts (Drapeau & McIntosh, 2020). A recent national survey of 62,171 college undergraduates revealed that, just in the previous year, 14% had thought seriously about suicide and 2% had attempted suicide (Eisenberg & Lipson, 2019). High school students are also likely to engage in suicidal behaviors. The national Youth Risk Behavior Survey (YRBS) is conducted every 2 years and monitors the suicide-related behaviors of U.S. students in grades 9–12. The survey asks questions about suicidal ideation to represent this category of behavior (Table 40.1). In the 2017 Youth Risk Behavior Survey nearly 20% of students reported engaging in some form of suicidal behavior, from ideation to attempting suicide (Kann et al., 2017; see Table 40.1). The high prevalence of suicidal thoughts in young people identifies suicide as a salient issue to be addressed in schools. Although specific data on SWGT are not avail-

Table 40.1
Suicide-Related Behaviors of Students in Grades 9–12 in the United States in 2017

Behavior (During the Last 12 Months Before the Survey)	Prevalence Rate (%)
Seriously considered attempting suicide	17.2
Made a plan about how they would attempt suicide	13.6
Attempted suicide one or more times	7.4
Suicide attempt resulting in an injury, poisoning, or an overdose that had to be treated by a doctor or nurse	2.4

Note. Data gathered from Youth Risk Behavior Survey, Tables 44, 46, 48, and 50 (Kann et al., 2017).

able, previous research has found that the rate of suicidal ideation among SWGT is similar to that among their peers (Baker, 1995; T. L. Cross et al., 2006; Martin et al., 2010). Without other evidence, one must assume that the rates of suicidal behaviors for SWGT are similar to those of all students.

Warning Signs

Rudd et al. (2006) defined a warning sign as "the earliest detectable sign that indicates heightened risk for suicide in the near-term (i.e., within minutes, hours, or days)" (p. 258). A warning sign describes a dynamic feature directly related to suicide rather than a static risk factor that may have a causal relationship or predictive power. An Internet search will locate many lists of warning signs of suicidality. The American Association of Suicidology convened a working group to develop a consensus-based list and has developed a mnemonic to remember the warning signs of suicide: "Is path warm?" (Juhnke et al., 2007). Table 40.2 illustrates the warning signs represented by this mnemonic.

Risk Factors for Suicidal Behaviors in Young People

Gould et al. (2003) conducted a review of a decade of adolescent suicide research and describe the following as significant risk factors:

- psychiatric disorders such as depression and anxiety,
- substance abuse,

Table 40.2
Consensus Warning Signs of Suicide

A person at risk for suicidal behavior most often will exhibit warning signs such as:		
Letter	**Represents**	**Description**
I	Ideation	• Expressed or communicated ideation • Threatening to hurt or kill themselves, or talking of wanting to hurt or kill themselves • Looking for ways to kill themselves by seeking access to firearms, available pills, or other means • Talking or writing about death, dying, or suicide when these actions are out of the ordinary
S	Substance Abuse	Increased substance use (e.g., alcohol or drug use)
P	Purposelessness	No reasons for living; no sense of purpose in life
A	Anxiety	Anxiety, agitation; unable to sleep or sleeping all the time
T	Trapped	Feeling trapped—like there's no way out
H	Hopelessness	Hopelessness
W	Withdrawal	Withdrawing from friends, family, and society
A	Anger	Rage, uncontrolled anger, seeking revenge
R	Recklessness	Acting reckless or engaging in risky activities, seemingly without thinking
M	Mood	Dramatic mood changes

Note. Information from Juhnke et al. (2007)

- cognitive and personality factors (hopelessness, coping skills, neuroticism),
- aggressive-impulsive behavior,
- sexual orientation (gay, bisexual),
- friend or family member of someone with suicidal behavior,
- parental psychopathology (depression, substance abuse),
- stressful life circumstances (interpersonal loss, legal/disciplinary),
- glamorization of suicide through media coverage, and
- access to lethal methods (firearms).

Suicide risk factors can be classified according to their biological (e.g., gender, sexual orientation, serotonin dysfunction), psychological (e.g., depressed mood, poor coping strategies, aggressive-impulsive tendencies), cognitive (e.g., poor social problem solving, inflexible thinking, rigidity of thought), and environmental (e.g., social isolation, stressful life circumstances, family dysfunction) characteristics (Stillion & McDowell, 1996). According to Stillion and McDowell's

(1996) Suicide Trajectory Model, the accumulation of risk factors leads to a greater likelihood of suicidal behavior.

From an extensive review of research on suicide, White (2016) created an expanded list of risk factors and added context by categorizing factors based on their source and effect (see Table 40.3). Risk factors, either biological or environmental, could *predispose* an individual to suicidal behavior, or *contribute* to their vulnerability. For example, some mental health conditions have a biological basis. Ninety percent of youths who complete suicide have been diagnosed with a psychiatric disorder (Wintersteen et al., 2007). Events could *precipitate* suicidal behavior. For example, a public humiliation could initiate thoughts of escape, leading to suicidal ideation. Bullying has been recognized as precipitating suicidal behavior; often the victims and perpetrators of bullying are socially isolated (Hazler & Denham, 2002). Risk factors are contrasted with *protective* factors, which buttress a person's resilience in the face of multiple risk factors. Protective factors may be internal, such as possession of effective coping skills, or external, such as supportive family members or a community's respect for mental health supports. Risk and protective factors occur at the individual level or at the intersection of the individual with family or peers. The school, community, and even the broader sociopolitical environment all can have an effect on risk and protective factors. Schools that provide what students need—or do not—contribute to the weight of factors on the risk or protective side of the equation. The same is true for communities and the larger society; some offer risk and others protection.

Joiner's (2005; Joiner & Silva, 2012) Interpersonal-Psychological Theory of Suicidal Behavior (IPTSB) proposes the specific cognitive risk factors of *thwarted belongingness*, a feeling of alienation from others; *perceived burdensomeness*, a belief that one is a burden on others, who would be better off without them; and *learned fearlessness*, a lack of fear of pain, injury, or death. Precipitating events may encourage these beliefs. Peers, families, schools, communities, and even society may contribute to them. For example, racism, a societal problem that permeates communities, schools, and the peer environment, was predictive of suicidal ideation among African American youths (Walker et al., 2017). What could be a stronger message that one does not belong than being discriminated against for their skin color? Similarly, the shocking statistic that LGBTQ youth have a 200%–600% higher likelihood of engaging in nonlethal suicidal behavior (Gould et al., 2003) is likely to be more a result of their lack of acceptance and belonging among peers and in society than any internal risk factor.

Table 40.3
Suicide Risk and Protective Factors Among Students With Gifts and Talents

Key Content	Predisposing Factors	Contributing Factors	Precipitating Factors	Protective Factors

Individual	• Previous suicide attempt
	• Depression, substance abuse, anxiety, bipolar disorder, or other mental health problems
	• Hopelessness
	• Persistent and enduring suicidal thoughts
	• History of childhood neglect, sexual or physical abuse
	• *Lack of trust in others*
	• *Profoundly gifted*
	• *Highly creative*
	• *Verbally gifted*
	• *Twice-exceptional*
	• *Introversion/isolation*
		• Rigid cognitive style
		• Poor coping skills
		  ▪ *Hiding, denial, or rejection of abilities*
		• Limited distress tolerance skills
		• Substance misuse
		• Impulsivity
		• Aggression
		• Hypersensitivity/anxiety
		• *Advanced cognitive abilities*
		• *Desire for authenticity*
		• *Hiding oneself for long periods of time*
		• *Overexcitabilities*
		• *Introversion*
		• *Perfectionism (self-, socially prescribed)*
		• *Persistent academic stress/pressure*
		• *Entity beliefs about intelligence*
		• *Long-term academic success*
			• Loss
			• Personal Failure
			  ▪ *Academic failure*
			• Victim of cruelty, humiliation, violence
			• Individual trauma
			• Health crisis
			• *Crisis with authority*
			• *Academic setting transitions*
			• *Thwarted pursuit of passion*
				• Individual coping, self-soothing, and problem-solving skills
				• Willingness to seek help
				• Good physical and mental health
				• Experience/feelings of success
				• Strong cultural identity and spiritual health
				• Living in balance and harmony
				• *Advanced cognitive abilities*
				• *Social information management skills*
				  ▪ *Code-switching skills*
				• *Long-term academic success*
				• *Passionate interests*

Table 40.3, *continued*

Key Content	Predisposing Factors	Contributing Factors	Precipitating Factors	Protective Factors
Family	• Family history of suicidal behavior/suicide • Family history of mental disorder • Early childhood loss/ separation or deprivation • *Family history of perfectionism*	• Family discord • Punitive parenting • Impaired parent-child relationships • Invalidating interpersonal environment • Multigenerational trauma and losses • *Mixed messages* • *Pressure to achieve* • *Pressure to gain entry to a single, prestigious university* • *Misunderstands SWGT*	• Loss of significant family member • Death of family members, especially by suicide • Recent conflict • *Achievement-related conflict*	• Family cohesions and warmth • Positive parent-child connection • Positive role models • Active parental supervision • High and realistic expectations • Support and involvement of extended family and elders • Connection to ancestors • *Unconditional acceptance without regard for academic achievement or failure*
Peers	• Social isolation and alienation ▪ *Misunderstanding of SWGT* ▪ *No intellectual peers* • *Anti-intellectualism*	• Negative attitudes toward help seeking • Limited/conflicted peer relationships • Suicidal behaviors among peers • *Pressure to be right* • *Demands to help/tutor* • *Threatening upward social comparison* • *Pressure to conform*	• Interpersonal loss or conflict • Peer victimization • Rejection • Peer death by suicide • *Outperformance of peer*	• Social competence • Healthy peer modeling • Peer friendship, acceptance, and support • *Respect of peers*

Table 40.3, *continued*

Key Content	Predisposing Factors	Contributing Factors	Precipitating Factors	Protective Factors
School	• History of negative school experience • Lack of meaningful connection to school • *Unprepared for SWGT* ▪ *Untrained teachers* ▪ *Inadequate curriculum* ▪ *Inadequate social/emotional support* ▪ *Boring*	• Reluctance/uncertainty about how to help among school staff • *Anti-intellectualism* • *Mixed messages* • *Misunderstood by school personnel* • *Neglected by school personnel*	• Failure • Expulsion • Disciplinary crisis • School-based harassment • *Unsupported in academic setting transitions*	• Success at school • Interpersonal connectedness/belonging • Supportive school climate • School engagement • Anti-harassment policies and practices • *Appropriate academic challenge* • *Opportunity to be with intellectual peers* • *Prepared for SWGT* ▪ *Trained teachers* ▪ *Appropriate curriculum* ▪ *Effective social/emotional support* ▪ *Interesting*

Table 40.3, *continued*

Key Content	Predisposing Factors	Contributing Factors	Precipitating Factors	Protective Factors
Community	• Multiple suicides • Community marginalization • Socioeconomic deprivation • *Limited career options* • *Unsupportive of public advanced education*	• Sensational media portrayal of suicide • Access to firearms or other lethal methods • Uncertainty about how to help among key gatekeepers • Inaccessible community resources • *Anti-intellectualism*	• High profile/celebrity death, especially by suicide • Conflict with law/ incarceration	• Opportunities for youth participation • Availability of resources • Community ownership • Control over services • Culturally safe healing practices • Opportunities to connect to land and nature • *Opportunities for appropriate challenge*
Sociopolitical	• Colonialism • Historical trauma • Cultural stress • Interlocking oppressions	• Racism • Sexism • Classism • Ableism • Heterosexism • *Anti-intellectualism*	• Social exclusion • Social injustice • *Systemic lack of access to educational opportunities*	• Social capital • Social justice • Social safety net • Social determinants of health

Note. Italicized items apply specifically to students with gifts and talents (SWGT). Adapted with permission from *Preventing Youth Suicide: A Guide for Practitioners* by J. White, 2016, British Columbia Ministry of Children and Family Development. https://www2.gov.bc.ca/assets/gov/health/managing-your-health/mental-health-substance-use/child-teen-mental-health/preventing_youth_suicide_practitioners_guide.pdf

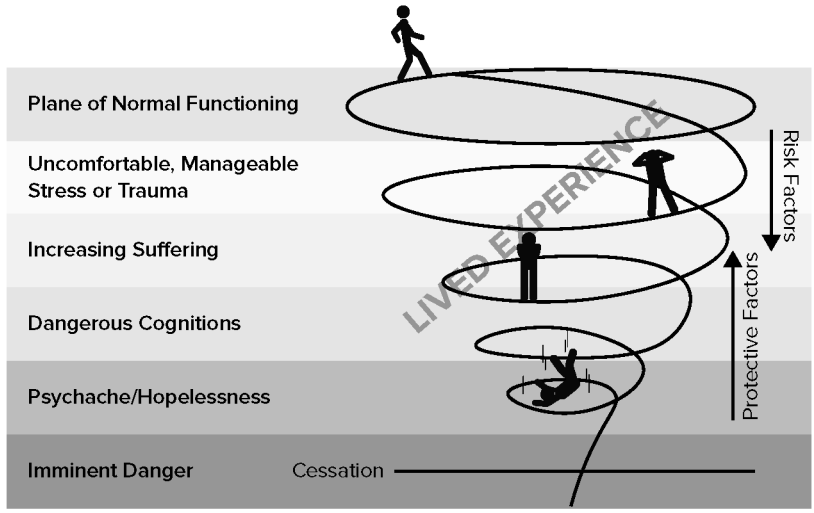
The Spiral Model of Suicidal Behavior Among Students With Gifts and Talents

Risk and protective factors are a critical component of T. L. Cross and Cross's (2021) Spiral Model of Suicidal Behavior Among Students With Gifts and Talents (see Figure 40.2). The model depicts life on a spiral representing two dimensions: mental health and time. As individuals develop over time, they generally inhabit the plane of normal, healthy functioning, far above the depths of despair or psychache (Shneidman, 1993) that nearly always precedes suicide. As life events or the emergence of risk factors (e.g., depression) affect one's mental health, individuals may drop from the plane of normal functioning into regions of discomfort or deeper into suffering. Protective factors, internal or external, can lift them out of the spiral, back to the top, but in the absence of these, the descent into dangerous cognitions, or psychache or hopelessness, may be inevitable. Without intervention, the outcome is likely to be a suicide attempt, which may or may not be successful. All of this takes place with the backdrop of a person's *lived experience*, their daily interactions and interpretations of events and possibilities. The frequency and duration of a drop into the spiral will differ based on a person's risk and protective factors. For some, a dip into the spiral will be rare, for others, frequent. For some, the trek back to the top plane will take a short time and for others, much longer. Accumulated risk factors can drag one down:

> When the accumulated weight of the risk factors is greater than the protective ones and when no help comes from the outside, the spiral will lead downward into dangerous cognitions, such as heightened inimicality, exacerbated perturbation, and constricted thinking (Shneidman, 1993). As one progresses downward through the spiral, momentum increases. Once they are deep in the throes of psychache, hopelessness sets in, leading to imminent danger and then to suicide. (T. L. Cross & Cross, 2021, p. 113)

The sequence of progress through the spiral is likely to be similar for all people. Many of the risk and protective factors will be the same for the gifted and general populations. Some, however, will be unique and, certainly, the lived experience of SWGT will differ from that of others because of their gifts and talents. The italicized items in Table 40.3 were added from research on the lived experience of SWGT to exemplify the types of risk and protective factors that will be unique to them. The spiral model offers counselors of students with gifts

Figure 40.2 *The Spiral Model of Suicidal Behavior Among SWGT*



Note. Adapted from "An Ecological Model of Suicidal Behavior Among Students With Gifts and Talents," by T. L. Cross and J. R. Cross, 2021, *High Ability Studies, 32*(1), p. 113. (https://doi.org/10.1080/13598139.2020.1733391). Copyright 2021 by Taylor & Francis. Adapted with permission.

and talents a framework to understand the transformation of a student from a healthy, functioning individual to one with dangerous cognitions. The role of risk and protective factors, both common to gifted and general populations and those likely to be found only among SWGT, is key to enacting an effective intervention. Timing of interventions should occur as close to the top plane of functioning as possible. Professional involvement is necessary once the individual reaches the level of dangerous cognitions.

Risk, Protection, and the Lived Experience of Students With Gifts and Talents

Suicidal behavior is a psychological process that begins with a person's thoughts. These thoughts may be affected by one's biology, as in the case of mental illness. Joiner (2005) proposed that suicidal thoughts are related to belongingness and burdensomeness. Shneidman (1993) claimed that hopelessness is at the center of thoughts around suicide. Hope is a future orientation, and hopelessness

arises from a belief that the future has nothing, or at least nothing good, to offer. Beliefs are learned from direct or indirect experiences. Beliefs about belonging or about one's future possibilities develop from experiences. Two things differentiate SWGT from their peers in the general population in the development of beliefs that can lead to suicidal behaviors: the experiences they have and how they process them. First, we will discuss how the processing of information may differ among SWGT.

Gifted Information Processing

In attempting to characterize SWGT, we first and foremost must recognize that this group is not monolithic. Some SWGT have received a gifted label for their high performance on a test of verbal abilities, some for mathematics, some for high achievement, some for creativity in art or music, and some for all-around high abilities. Some SWGT have not been noticed, as they conform to peer norms and attempt to fit in. SWGT are often described as preferring abstract, complex material, but this preference may be only in their area of ability or interest, or they may not have this preference at all. Many are never identified and remain underrepresented as a group. Some SWGT may be highly motivated to achieve, some less so. Some students have such great passion for their area of interest, they will pursue it to the detriment of all other activity (Coleman & Guo, 2013; Chapter 22 by Coleman et al., this volume). Some may be quick processors of information, and some slower than their peers. Some may have a large knowledge base from which to draw, whereas others may not. Some may be rigid in their thinking, and some may be open to new ideas. As in the general population, some SWGT may be perfectionistic, expecting themselves to be perfect in whatever they try (self-oriented perfectionist) or believing that they must be perfect to fulfill others' expectations (socially prescribed perfectionist). It is these socially prescribed perfectionists who may be more likely to engage in suicidal behavior (Hewitt et al., 2006).

Several studies have found personality differences, with higher levels of introversion (T. L. Cross et al., 2018; Sak, 2004), openness to experience (Zeidner & Shani-Zinovich, 2011), and greater emotional stability (e.g., Ackerman & Heggestad, 1997; DeYoung, 2011) among SWGT. Although these studies suggest a preponderance of these characteristics among SWGT, it is uncertain that a counselor will have a student who fits a highly introverted, highly open to experience, and emotionally stable profile. T. L. Cross et al. (2018) found five personality profiles in a sample of honors college students, and none fit this exact pattern. The largest group of honors college students was more extraverted than the norm, more open to experience, and more emotionally stable. It may be helpful for

counselors to consider this heterogeneity as they get to know their students as individuals.

Now that we have established variability, it is important to consider how exceptional abilities may manifest in the processing of information. Among SWGT who prefer abstract, complex thinking, concrete, simplistic lessons can be anathema (Kanevsky & Keighley, 2003). For those who are open to experience and crave novelty, repetition can be unbearable. A student with a high speed of processing may spend a great deal of time waiting for peers to catch up (Peine & Coleman, 2010).

What makes these varied information-processing abilities or preferences risk or protective factors has more to do with the experiences within which they come to the fore. Rapid speed of processing can be protective when one can quickly assess a situation, but it can be a risk factor when one jumps to conclusions without adequate information. A large knowledge base can be protective when it is useful, supports one's passions, or is paired with a willingness to help peers; it can become a risk when paired with arrogance or an unwillingness to share. A large repertoire of coping strategies can be a powerful protective factor. SWGT can support their own therapy through their cognitive abilities (Peterson, 2014; Sedillo, 2013). On the other hand, cognitive abilities may lead to a successful suicide attempt. On the basis of several psychological autopsies of SWGT who died by suicide, T. L. Cross and Cross (2018) expressed concern that the students had researched and planned their attempts in such a way that failure on their first attempt was unlikely.

Lived Experience

What is it like to be an SWGT? From the previous section, it becomes clear that there is no one way to answer that question. Only one thing can we say with certainty about the life of a SWGT: They have the ability to be exceptional (read: different) in some way. This may lead to exhilarating experiences of intellectual or creative pursuit (Csikszentmihalyi, 1990) when abilities and opportunities merge. Achievements may be celebrated, sometimes from a very early age and throughout one's life. Shared abilities and interests can provide a foundation for interpersonal relationships where one can find acceptance and belonging. SWGT with exceptional verbal abilities can articulate and express deep, complex thoughts. SWGT with creative abilities can produce novel works. A sense of purpose or identity can develop at an early age. These exceptional experiences can be protective factors, should an SWGT be knocked off the plane of normal functioning.

Some experiences associated with exceptional ability are not so positive. The impact of an academic failure after a lifetime of successes can be much greater

than the impact of a failure when one has had previous experience with failure. Celebrations of achievement can turn into pressures to achieve as one matures. In a study of Irish secondary SWGT's social experiences, pressure from others to achieve and to always be right were frequent and provoked the most negative emotions (J. R. Cross et al., 2020). A willingness to help peers can develop into an expectation that one will help, even when doing so becomes burdensome (J. R. Cross et al., 2019). Peers may reject the top performer in their class, especially when the environment is a competitive one. Teachers who draw attention to one student's outperformance of peers, pointing out an outstanding paper or test score, for example, may intend to honor the SWGT's achievement. Making the outperformance salient to peers, however, may exacerbate upward social comparisons (Zell et al., 2020). Fearing rejection, SWGT may worry about the threat they present to their peers and try to hide their achievements (T. L. Cross et al., 1991/2014) or even underachieve. SWGT learn to manage the information others have about them to gain social latitude (Coleman & Cross, 1988/2014). Years of hiding one's abilities or trying to conform to peer norms can take a toll in identity formation and missed opportunities.

Parents sometimes misunderstand or resent their child (J. R. Cross et al., 2019), creating a risk factor for later suicidal behavior. Some parents may demand their child spend a majority of their time focused on their talent development (e.g., playing the violin, studying math), while others may demand they spend less time on their passion (e.g., "Are you reading again? You should play with your friends more."). SWGT often report feelings of differentness from peers, particularly in their seriousness about learning (Coleman et al., 2015; Coleman et al., Chapter 22, this volume). SWGT's exceptional abilities often make them actually different from their peers, as in the case of students with high verbal ability, who may have broader vocabularies or be able to express ideas far beyond their peers. SWGT in the verbal domain report greater difficulties with peer relationships than those with exceptional mathematics ability (Lee et al., 2012). Finding peers with similar abilities or interests is not always possible in age-graded, heterogeneous classrooms. Romantic relationships in the secondary school years may be fraught, if an intellectual peer cannot be found. It can be challenging to build a relationship with someone who cannot understand your interests or ideas (Exline & Lobel, 1999).

Segregated gifted programs present their own challenges. SWGT who wish to keep their abilities under wraps would be outed by such visible, exclusive efforts to provide an appropriate curriculum. The stress of engaging in opportunities that are fulfilling academically, but that interfere with friendships, can be great. The hours spent on a passion may leave little time to socialize. Particularly in the

early years, when children learn social skills and friendly negotiation, time spent developing their talents can lead to deficits in social knowledge and experiences.

Schools can provide a positive environment, where all students' abilities are respected and nurtured. Schools that attend to students' social and emotional development can promote feelings of belongingness (Eddles-Hirsch et al., 2010). Some schools are "ready" for SWGT (Coleman et al., 2015; Coleman et al., Chapter 26, this volume) with trained teachers and a flexible, advanced curriculum. Some are not. An in-depth study of an SWGT with Attention Deficit/Hyperactivity Disorder who died by suicide found the unprepared school was a contributing risk factor (T. L. Cross et al., 2020). Boredom, a lack of interest in the curriculum, and no support for his disability, led to hopelessness. The ready availability of lethal means—a gun—ensured that his efforts to escape the psychological pain would be successful. It is critical that counselors consider the risk generated by a school not providing an appropriately challenging education (J. R. Cross & Cross, 2015).

Deci and Ryan's (2000) self-determination theory identifies the human needs of relatedness (belonging), autonomy, and competence. Without a balance of these three universal needs, well-being suffers. An SWGT whose parents demand they spend an inordinate amount of time on their talent development may build their competence in that domain, but at the cost of their autonomy, as they submit to the parents' demand, and of relatedness, as they please their parents, but have no time for meaningful peer relationships. Spending an excessive amount of time building friendships may mean educational opportunities fall by the wayside, leading to an imbalance in the development of competence. It may be difficult to feel a connection to (relatedness) school when the curriculum is unsuitable or the teacher and peers misunderstand a student's desire to learn. SWGT who dropped out of high school felt disrespected by a school that did not seem to care about their desire to learn (Kanevsky & Keighley, 2003).

It may be easy for a counselor to dismiss a student's upset over a poor grade or a failed relationship because it seems like an overreaction. This may not be the case, however. The mixed messages SWGT receive from peers and adults to achieve to the best of their ability and not to achieve can result in a double bind. Years of an inability to find friends may make the one failed relationship more significant than most. Hopelessness can develop from years of being misunderstood or rejected. When such risk factors as being misunderstood by peers and adults, having to hide one's interests and abilities out of fear of rejection, or placement in an inappropriate educational experience outweigh their protective factors, SWGT may begin the descent into the spiral.

Interventions

Educational and relationship experiences can move an SWGT from the plane of normal functioning into uncomfortable, but manageable stress (see Figure 40.2). With support from family or educators who come together to provide a better experience, students may move back up to the lane of normal functioning. Without it, they may experience increasing suffering. Further neglect of their needs can lead to dangerous cognitions, at which point professional intervention is necessary. A change in their education may be what is needed to lift them up in the spiral—skipping a grade or changing schools. Opportunities to be with intellectual peers can help them build connections, through special in- or out-of-school programs. Reducing the competitiveness of a school's culture can reduce the impression students have of their success as part of a zero-sum game (i.e., I win, you lose; Grobman, 2009).

Counselors can teach strategies for dealing with the stressors in SWGT's lives. Peterson (Chapter 24, this volume) offers suggestions for differentiating counseling strategies for SWGT. Parents may, knowingly or unknowingly, be applying pressure to their highly able child to achieve. In one high-performing school district with a high rate of adolescent suicide where the first author spoke on the topic, parents strongly pressured their children to attend not just a highly selective college, but one in particular: Harvard. Counselors may need to educate parents on the effects of excessive stress. T. L. Cross and Cross (2018) proposed that a climate of care be developed, in which the thriving of all students is the goal. Knowledge of risk factors and warning signs can assist counselors in the identification of youth in crisis who need immediate attention. This is an important part of the counselor's function in a school.

Responding to a Young Person in Crisis

The presence of any of the warning signs in Table 40.2 warrants an appropriate clinical intervention to ensure the child's safety (Juhnke et al., 2007). For example, if a student reports suicide ideation, possible interventions could range from close daily monitoring of the student to hospitalization, depending on the severity and duration of the ideation. Just making a statement that life is not worth living places a young person at risk but does not require hospitalization. It is a dangerous cognition that should not be ignored. Outpatient mental health services can help prevent escalation of symptoms and progression to more severe categories of suicidal behavior (Wintersteen et al., 2007; see Figure 40.2).

Assess Risk. Individuals who exhibit signs of distress should be actively questioned (Reis & Cornell, 2008). The Question, Persuade, Refer program provides training to counselors to guide their interactions with potentially suicidal youth (see https://qprinstitute.com). Wintersteen et al. (2007) provided a decision matrix for assessing suicide risk and selecting referral options developed for use with adolescents. The evaluation has four simple questions and guidance on how to assess suicide risk based on responses. First, the counselor asks the student two questions directly: (1) "Have you felt like life is not worth living?" and (2) "Have you wanted to kill yourself?" A positive response to the first question indicates moderate suicide risk and necessitates a referral to a social worker or psychologist (Wintersteen et al., 2007). Suicidal individuals can be reluctant to seek or accept help; therefore, it is important that counselors persuade students to accept a referral, and then either accompany the students or secure an agreement from the students to get professional help (Reis & Cornell, 2008). If a positive answer is made to the second question, this indicates high suicide risk. For high-risk individuals, counselors should follow up with two additional questions: (3) "Have you ever tried to kill yourself?" and (4) "Have you made plans to kill yourself?" A positive response to question 3 elevates the suicide risk to imminent. High- and imminent-risk cases should be referred to a crisis team and may warrant hospitalization.

Create a Safety Plan. Negotiation of a safety plan is critical to assessment and treatment of suicidality (Bridge et al., 2006). This plan should address the securing of lethal methods, precipitating events to the crisis, emotional regulation, an agreement to inform a responsible adult if suicidal impulses occur, and a method for coping with suicidal urges (Drye et al., 1973). A refusal to sign a safety plan is a clear sign of a need for immediate help (McConnell Lewis, 2007). However, there is a paucity of empirical evidence to support safety plan effectiveness (Bridge et al., 2006); the safety plan may be of more use as an assessment of suicidality rather than as a contract for no harm (McConnell Lewis, 2007). A safety plan should not be the only intervention used.

Measures to Reduce Risk for All Students

Responding to the individual in crisis should not be the only approach to suicide prevention used in a school. Embedded within the efforts to build a caring community, where everyone is thriving (T. L. Cross & Cross, 2018), there must be plans for actual crisis intervention. A proactive approach can make a difference in the lives of many young people in comparison to waiting for the moment of crisis. A practical, multipronged plan addresses responses to the individual in crisis, suicide awareness, and programmed skills training to have the maximum

impact. At the proactive end of the prevention spectrum, wide-scale screening can reliably identify those students who are thinking about suicide and facilitate early intervention to possibly prevent further or more severe suicidal behavior.

Suicide Awareness Training. Adults must be appropriately trained to have the knowledge and expertise they need to provide the awareness, guidance, and decision making required for a safe, caring community (T. L. Cross & Cross, 2018). When adults base decisions on myths and inaccurate beliefs, rather than fact, then "good will, absent of significant training, can actually contribute to a less safe environment" (T. L. Cross & Cross, 2018, p. 76). Suicide awareness programs should prepare teenagers to identify peers who are at risk and take appropriate action. The logic behind such programs is twofold. First, suicidal ideators are most likely to confide in a peer instead of a teacher or parent (T. L. Cross et al., 1996; Reis & Cornell, 2008). Second, for half of ideators, ideations lasted less than one day (Drum et al., 2009). The short duration of ideations make it more likely that a friend would notice the behavior. Students should be taught to be empathetic toward peers and to persuade peers to seek help from a responsible adult because "a mad friend is better than a dead friend" (Adams, 1996, p. 416). All students should learn about suicide warning signs and how to help a peer who expresses suicidal thoughts.

Skills Training. A primary component of a school suicide prevention program is training for all students that focuses on individual wellness and development of social competency (Adams, 1996; T. L. Cross & Cross, 2018). Skills training programs should emphasize the development of coping, problem-solving, and cognitive skills to make up for deficiencies that youth may have in these areas and to reduce suicide risk factors such as depression (see Chapter 39 by Wood and Smith, this volume), substance abuse, and hopelessness. Training in the positive aspects of diversity of all kinds, including cognitive diversity, will benefit SWGT and all students. Celebration of diversity should be a schoolwide objective. Based on the needs of the school population, guidance departments should develop additional goals and objectives for suicide prevention programs (Adams, 1996).

Intervention Strategies Targeted to Needs of Students With Gifts and Talents

Generally, prevention recommendations for the general population guide suicide prevention measures for SWGT. Knowledge about the risk and protective factors unique to SWGT is critical. T. L. Cross et al. (1996) recommended that a proactive stance be taken with adolescent SWGT, including teaching them about their emotional experiences and needs, establishing and maintaining com-

munication between adults and adolescents, challenging ideas of suicide as an honorable solution, balancing positive and negative themes in curricular and resource materials used with students, and assessment for emotional, psychological, or relationship difficulties. Hyatt (2010) made four specific recommendations for action: reduce bullying, establish relationships between adolescents and adults, educate adults on the characteristics and social-emotional needs of SWGT, and teach SWGT that self-worth comes from their uniqueness, not perfection. Strategic interventions designed with these goals in mind will benefit all students, including SWGT.

Conclusion

Research indicates that the risk factors of suicide for the general adolescent population are valid for the gifted population, and these similarities should not be ignored. Everyone's awareness of potential risk factors and warning signs is a necessary part of suicide prevention. Knowledge of the differential experiences of life as a SWGT can help counselors recognize risk factors unique to them. Knowing students' characteristics and establishing relationships with students will help counselors to monitor potential suicidality. Suicide warning signs should be familiar to everyone in the school community, including families of students. The presence of any warning signs warrants immediate intervention. The importance of relationship building between adolescents and the responsible adults in their lives cannot be overemphasized as a preventive measure. Above all, if there is any concern the student is experiencing increasing suffering, act on suspicions—talk to the student and assess the situation.

Evidence from psychological autopsies of adolescents suggests that students are more likely to confide in a peer than an adult (T. L. Cross et al., 1996, 2020; Hyatt, 2010), and surveys of students have revealed that typical periods of suicide ideations are not prolonged (Drum et al., 2009). Thus, programs that minimize dependence on identifying the moment of greatest suicide risk are needed. Suicide awareness, screenings, and skills training programs can meet this need. Skills training programs benefit all students by strategically working to reduce suicide risk factors, helping to increase positive coping mechanisms and decrease depression. It is also important to realize the protective factors of the connections among adolescents, their peers, responsible adults, and the community in minimizing the risk of suicidal behaviors. Every member of the community must be vigilant in looking for signs of distress and responding with empathy. When all members of a community value and work toward the thriving of one another, SWGT will flourish as well.

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CHAPTER 41

Social Coping

SAKHAVAT MAMMADOV

Schools are social places. Students learn in the company of their peers and with the collaborative support of their families, teachers, and other school staff. Peer relationships have been recognized as important to improved school attitudes, performance, and social-emotional development in students (DeLay et al., 2016; Wentzel, 2017). Gifted students, like all children and adolescents, have a developmental need for positive peer relationships. However, being identified as gifted may limit the perceived acceptance by their classmates and, therefore, lead them to feel stereotyped and to experience limited social latitude (T. L. Cross et al., 2018). This phenomenon has been termed "the stigma of giftedness" and studied through Coleman's (1985) Stigma of Giftedness Paradigm (SGP). The SGP has three basic tenets:

1. Gifted students desire normal social interactions.
2. When others learn of their giftedness, gifted students believe that they will be treated differently.
3. Gifted students attempt to manage the information others have of them to maintain a greater amount of social latitude.

This chapter probes into these tenets, summarizes the strategies gifted students engage in managing information, and communicates the ways school coun-

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selors can help them successfully navigate social interactions and cope with the social challenges of their giftedness.

The Stigma of Giftedness

Traditionally, stigma has been defined based on a deficit model, which considers only inferior deviants to be stigmatized (Striley, 2014). For example, Goffman's (1963) famous analysis of stigma deals with absolute stigmas and does not focus on subtle forms of spoiled identity, such as being exceptional or "gifted." Posner (1979) expanded Goffman's notion to include *difference*, rather than *deficit*, as the true nature of stigma. She argued that being superior to others is as problematic as being inferior and that being excellent can be isolating and quite painful. Tannenbaum (1983) noted that gifted students are influenced by others' feelings about their abilities. They may feel apologetic for their lack of similarity with others (Posner, 1979). Mendaglio (2012) argued that gifted students feel stigmatized, and their fear of stigmatization stems solely from being labeled gifted. Coleman and his colleagues (Coleman & Cross, 1988, 2000; Coleman & Sanders, 1993; T. L. Cross et al., 1991) built on Goffman's work and proposed the SGP. Numerous studies have confirmed that children are cognizant of the SGP and tend to manage the information others have of them to attain normal social interactions in schools (Coleman & Cross, 1988; J. R. Cross et al., 2019; T. L. Cross et al., 1995; T. L. Cross & Stewart, 1995). Individuals feeling stigmatized may experience reductions in the levels of need satisfaction (Williams & Gerber, 2005). Therefore, they may attempt to use available cognitive, emotional, and behavioral resources to regain their need satisfaction. In the context of the SGP, gifted students may engage in behaviors attempting to mask their less visible intellectual differences (T. L. Cross et al., 1991).

Social Coping Strategies

Early studies examining the stigma of giftedness have reported several coping strategies students utilize to reduce perceived social stigma (Buescher & Higham, 1985; Buescher et al., 1987; Coleman & Cross, 1988; T. L. Cross et al., 1991, 1995; Delisle, 1984; Huryn, 1986). These studies have shown that gifted students attempt to cope with the sense of "differentness" by underachieving (Buescher et al., 1987), pretending tests or assignments were difficult (T. L. Cross et al., 1995), not answering questions in class, asking inappropriate questions, being a class clown (Huryn, 1986), reducing vocabulary, lying about getting good grades

(Huryn, 1986), and denying, even to themselves, that they are gifted (Buescher, 1985).

T. L. Cross et al. (1991) explored cognitive behavioral strategies utilized by gifted adolescents to manage the stigma of giftedness. They developed a questionnaire after conducting phenomenological interviews that explored the experience of being gifted in school. In the questionnaire, students were asked to respond to six fictitious scenarios described as potentially stigmatizing events during the normal school day by selecting from strategies noted during the interviews. The responses represented a "continuum of visibility" ranging from *Truth* (i.e., the student chooses not to engage in any management of information) to *Lie* (i.e., the student chooses to answer in a diametrically opposed way to their true beliefs about the question). Other choices were *Placate* (i.e., the student chooses to play down their "expertise" to mollify the situation and then tell the truth), *Cop-out* (i.e., the student chooses not to answer the question but rather deflect the conversation toward someone else), and *Cover-up* (i.e., the student chooses to play down their expertise, but then does not follow up with an answer to the question). The Placate response was chosen most often. Apparently, as the authors noted:

> gifted and talented students may not mind others knowing they value their schooling, and that they work at doing well in school. What they do not want, however, is to lose their ability to control the degree to which others truly perceive the extent and nature of their differences. (p. 53)

Through her own research, Swiatek (1995) developed an instrument, the Social Coping Questionnaire (SCQ), to measure the use of social coping strategies among gifted adolescents. The first version measured four strategies: denial/acceptance of giftedness, denial/acceptance of the importance of popularity, denial/acceptance of the impact of giftedness on peer acceptance, and activity level. The instrument has been revised several times to include items reflecting possible further coping strategies such as using humor and helping others (Swiatek, 2001; Swiatek & Dorr, 1998). Table 41.1 presents the most common coping strategies that emerged across studies and representative items from the SCQ. The SCQ has been used in a number of studies with different populations, including elementary school students (Swiatek, 2002), gifted adolescents at a residential school (T. L. Cross & Swiatek, 2009; Swiatek & Cross, 2007), students in public, private, and parochial high schools (Swiatek, 2001), students in summer programs designed specifically for gifted learners (Rudasill et al., 2007; Swiatek & Dorr, 1998), Chinese gifted students in Hong Kong (Chan, 2003, 2004, 2005), and Irish and American students in grades 3–8 (J. R. Cross et al., 2015). The number

Table 41.1
Coping Strategies and Representative Items From the Social Coping Questionnaire (Swiatek, 1995)

Coping Strategy	Sample Item
Denying giftedness	I am not gifted; I am just lucky in school.
Conformity	I try to look very similar to other students.
Using humor	I tell a lot of jokes in school.
Helping	I try to use what I know to help other students.
Hiding giftedness	I don't tell people that I am gifted.
Deny impact	Other students do not like me any less because I am gifted.
Focus on popularity	I don't worry about whether or not I am popular.

of social coping factors and psychometric properties have differed across some of these studies depending on the population under consideration. This may be an indication that the social experiences of gifted students and their responses to it are not fully understood (J. R. Cross et al., 2019).

With a purpose of deepening understanding and explanation of social coping among gifted students, J. R. Cross et al. (2019) conducted a multiple-case study with a carefully selected, cross-cultural sample of 90 students (50% female) from five countries (United States, Ireland, United Kingdom, France, and South Korea). The researchers hypothesized that social experiences of gifted students both in school and outside are determined or influenced by factors such as age, sex, the type of services or programs, and the perceived stigma, and that these social experiences lead students to engage in coping behaviors. Findings suggested that students were pleased with their exceptional abilities. However, giftedness was a social handicap for many of them. They attempted to hide their abilities or conform to peers' behaviors. Prosocial helping behaviors were found among students in nearly all age groups (elementary, middle, and high school) and a focus on the self was identified as a useful coping strategy in all countries except one (France).

Two Broad Categories of Coping Strategies

The ways in which students cope with the stigma of giftedness could be categorized into two distinct types: approach and avoidance strategies. Approach strategies address the challenge of stigma by managing it, while avoidance strategies

deal with minimizing the negative emotions by escaping the situation. Students may have a consistent preference for one or the other type of coping. Tomchin et al. (1996) reported that gifted adolescents tend to employ an action-focused approach and assume personal responsibility for dealing with stressors. They infrequently use avoidance strategies, such as ignoring the problem. J. R. Cross et al.'s (2019) cross-cultural study suggested that students learned to behave in ways that helped them achieve normal social interactions. Self-focus was found to be a frequently reported strategy that gifted students across different age groups used. Students chose to focus on their own work and value their abilities, which helped them to cope with negative peer experiences. Other approach strategies reported in various studies include involvement in extracurricular activities and helping others (Chan, 2003; J. R. Cross et al., 2015, 2019; Rudasill et al., 2007; Swiatek, 2001). Denial of giftedness, hiding, and conformity are examples of avoidance strategies. Although these strategies may help a student in reducing the stress associated with the perceived stigma, it can be a challenge for them to craft their own identities in the long term.

Approach strategies have been found to be predictors of positive self-concept and other indicators of well-being in multiple studies (e.g., Chan, 2003; J. R. Cross et al., 2015; Swiatek, 2001). Chan (2003) reported that social coping strategies, such as involvement in activities, were associated with high levels of emotional intelligence. Similarly, engaging in activities and helping peers were positive predictors of academic self-concept (J. R. Cross et al., 2015). Quite the contrary, avoidance strategies were reported to be associated with less positive psychological well-being (Chan, 2003, 2004; J. R. Cross et al., 2015; Swiatek, 2001). For example, Chan (2004) found that denial of giftedness was related to dysphoria and suicidal ideation. In a more recent study, Cross et al. (2015) took a person-centered perspective to identify patterns of social coping by self-concept in American and Irish gifted students. The low self-concept groups in both samples had the highest denial of giftedness scores. The high self-concept group in the Irish sample had significantly lower scores on conformity compared to low and medium self-concept groups. Students with low self-concept are likely to feel less competent to handle the stigma and, therefore, opt for avoidance strategies.

Group Differences

Comparisons between gender and age groups with respect to coping strategies were reported in several studies. Findings from studies using the SCQ are inconclusive, with different studies reporting different strategies to be significant across groups. The directions of differences, however, are nearly consistent.

Female students are more likely to use denying giftedness (Swiatek, 2001; Swiatek & Cross, 2007; Swiatek & Dorr, 1998), helping others (Foust et al., 2006), and social interaction (Swiatek, 2001, 2002; Swiatek & Dorr, 1998) than male students. Male students have reported greater use of humor (Swiatek, 2001; Swiatek & Cross, 2007) and less concern with popularity (Chan, 2004) compared to their female counterparts. Age differences emerged in several studies. Younger students were more likely to focus on conformity (Chan, 2005) and consider popularity important than older students (Chan, 2005; Foust et al., 2006; Swiatek, 2002). Helping others (Chan, 2005; Foust et al., 2006; Swiatek, 2001) and denying giftedness (Foust et al., 2006) were likely to be more frequently used by older students than younger ones. Effect sizes in most of these comparisons ranged from small to moderate, suggesting that differences between gender and age groups may exist but are minimal. Findings should be cautiously interpreted.

Changes in Social Coping

Gifted students use coping strategies to find a comfortable niche in their school and other social environments. Experiences and outcomes of students in various settings and times are not necessarily the same. The gifted student experiences inner conflict when they are expected to behave in certain ways, and they recognize that knowledge by others of their "tainted" gifted characteristics are potentially discrediting because their full social acceptance is disrupted. This knowledge has different effects in different environments and at different times in students' lives (Coleman & Cross, 1988). There is only one existing study that examined changes in gifted students' social coping longitudinally. T. L. Cross and Swiatek (2009) compared students' self-reported social coping at the time of arrival on the campus of a state-funded residential academy for academically gifted adolescents with their self-reported social coping after 1 year and 2 years at the academy. Students showed a greater tendency to deny giftedness and reported less social interaction (i.e., getting involved in extracurricular activities) after a year of academy enrollment than before. The negative change in denying giftedness can be interpreted by Marsh and Parker's (1984) big-fish-little-pond effect (BFLPE) model, which refers to the ways in which group membership influences one's self-evaluation. Students who entered a residential academy were exposed to a gifted comparison group and, therefore, were likely to be experiencing decline in self-concept. There is research evidence suggesting a negative association between self-concept and denial of giftedness (J. R. Cross et al., 2015). T. L. Cross and Swiatek interpreted the decrease in social interaction as a result of students having

enough in common with other academy students after a year or 2 years that they no longer needed to rely on extracurricular activities to find friends.

Recommendations for Support

The research base on social coping in the context of giftedness is still developing. Existing studies had some limitations, such as effect size measures, relying largely on self-report instruments, different factor structures for the SCQ, and the low reliability of those factors with a variety of samples. Bearing these limitations in mind, counseling decisions should be made cautiously and, of course, on an individual basis. What is known for sure is that gifted students' experience of school is different from that of typical students (Swiatek, 2012). This differentness may prevent, or at least interfere with, gifted students' full social acceptance and social-emotional development (Coleman, 1985). Not all gifted students would respond similarly to the experience of stigma. Those who are exceptionally gifted may have greater difficulties with coping. The area of exceptionality may also be a factor. Swiatek (1995) found that gifted students with extraordinary verbal abilities are likely to suffer more from the negative social aspects of giftedness compared to those with extraordinary abilities in mathematics.

In the stress literature, there are two types of coping responses: emotion-focused and problem-focused (Lazarus & Folkman, 1984). Emotion-focused coping deals with the stress management by attempting to reduce negative emotional responses associated with stress, whereas problem-focused coping targets the causes of stress to change the stressful situation. Research has shown that problem-focused coping strategies are more successful in stressful situations, such as stigma and discrimination (e.g., Pascoe & Richman, 2009). Counselors can help students to identify and deal with the root cause of the problem when possible. In addition, approach coping strategies, such as becoming involved in extracurricular activities and helping others, can be considered problem focused. For example, it may be helpful to encourage students to engage in social activities. Engagement in extracurricular activities offers opportunities for students to socialize with peers who share common interests.

The perception and experience of stigma may have positive outcomes for some gifted students. Identities are imposed on stigmatized individuals (Goffman, 1963). Such imposition may prompt individuals to define themselves; they may accept the given identity or carve a new one (Striley, 2014). School counselors may play a leading role in helping students redefine the meaning of "giftedness," "normal," and "fitting in." Students who prefer avoidance strategies, such as denying giftedness, may be more vulnerable to identity confusion. There is a dearth

of literature on individual characteristics that may explain why some gifted students prefer avoidance strategies over approach strategies. Several studies (e.g., Chan, 2003; J. R. Cross et al., 2015; Swiatek, 2001) show that there is a negative association between students' self-concept and the use of avoidance strategies. Self-beliefs are proximal predictors of many behaviors and social outcomes. Counselors, teachers, and parents should work together to facilitate children's healthy self-concept development. In addition, it is important to identify and understand what evidence these students have to believe that they are stigmatized by others. The SGP assumes that the perception of differentness may or may not be rooted in students' actual experiences of peer relationships. It is quite possible that there is not an actual prejudice against them. If this is the case, these students can be encouraged to change their attitude and accept their giftedness.

Students differ in their personalities. It may not be as easy to encourage introvert gifted students to engage in social activities as it is for extraverts who typically have a tendency to enjoy social interactions. Introvert students may prefer interaction with a single friend or a small group of friends. Students with distinct personalities may engage in different social coping behaviors to maintain the social latitude to which they aspire. These individual differences should be considered when helping students learn adaptive coping strategies.

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CHAPTER 42

Differentiating Counseling Approaches for Gifted Children and Teens: Needs and Strategies

JEAN SUNDE PETERSON

Social and emotional needs of gifted children and teens are many and varied, but they probably fit categories of concerns in the general population, such as belonging (Brendtro et al., 2019), mattering (Dixon & Tucker, 2008), and self-regulation (Keiley, 2002). When gifted students feel safe and connected to at least some age peers, believe their teachers care about them, and are able to manage social interaction adequately, they probably feel all right in school. On the other hand, if they feel unconnected, dismissed, or out of control, or their behavior, thinking, or creative impulses are a poor fit, their experience is likely uncomfortable. It is important that school counselors consider that gifted students have concerns, regardless of their ability and achievement levels. Given the call from the American School Counselor Association (2016) to address needs of *all* students, school counselors need to provide prevention and intervention services for gifted students as much as for other students.

Unfortunately, school counselor preparation programs only rarely include attention to high-ability children and teens as a special population. Because mental health counselors-in-training usually take the same basic courses as school counselors-in-training, the gap in the preparatory curriculum occurs for them as well. This chapter can begin to address that gap.

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Needs

Well-Being

What do school counselors see when bright students self-refer, or parents or teachers refer them? What should counselors understand to be able to respond appropriately to these students? Is giftedness itself a risk factor? Because studies of mental health of gifted youth are often based on high-achieving or other limited samples only, it is difficult to know whether giftedness is associated with more, fewer, or simply different mental health concerns during the school years. Empirical evidence has generally not supported the notion that, across many aspects of well-being, gifted youth are more vulnerable socially and emotionally than their age peers are (Robinson & Reis, 2016), although a recent study of Mensa adults (Karpinski et al., 2018) connected psychic overexcitabilities (Piechowski, 2013), often associated with giftedness, with vulnerability. Regardless, this chapter approaches counseling gifted students as if giftedness is a significant overlay on how negative life events and developmental challenges are experienced. It is difficult to know whether including gifted underachievers, gifted students from minority ethnocultural groups not identified for programs, or gifted students with learning disabilities in research samples moves findings in the direction of better mental health or worse. However, it is important to acknowledge that some gifted students are at risk for poor educational, emotional, relational, and career outcomes because of anxiety, depression, a chaotic or abusive home, constant family relocation, a learning disability, being a bully or being bullied, or fear of abandonment because of sexual orientation or gender identity, regardless of whether those concerns are obvious or hidden. In general, presenting issues should be viewed in the context of giftedness.

All children and teens have basic needs, of course, but for gifted students these needs have dimensions that reflect their high ability. They need to have their complexity acknowledged and to be appreciated for more than just performance. They need information about universal developmental tasks so that their struggles can be normalized, but they also need to hear how characteristics associated with giftedness may affect how they *experience* development. Some characteristics may be inappropriately misdiagnosed as pathology (Webb et al., 2016), with impact on sense of self. Bright students need school personnel to view them with compassion because they must bear the burdens of high ability (Peterson, 2012). They need contact with adults and peers who accept them unconditionally and without judgment, and they need opportunities to learn how to express emotions and concerns about present, past, and future. They also need to know that nothing

stays exactly the same, including extreme feelings such as suicidal thoughts. When counselors are aware of these needs, they are likely to differentiate their counseling approaches accordingly.

In an edited book (Mendaglio & Peterson, 2007), counselors whose clinical work focused on giftedness described a wide variety of presenting issues and some of their approaches. Among the concerns were extreme sensitivities, depression, anxiety, social difficulties, underachievement, drug dependency, troubling life events, developmental tasks, perfectionism, giftedness combined with disability, Asperger's syndrome (now classified as autism spectrum disorder), sexual promiscuity, stealing, behavior, truancy, sexual identity, thought disorders, abuse, and choices related to extreme talent. Obviously, gifted individuals may present with a wide range of social, emotional, and academic difficulties. In one unpublished component of a complex study of life events (Peterson et al., 2009), when asked what they wished teachers understood about them, gifted graduates referred to stress, isolation, hostility, ridicule, silent sensitivity, being and feeling different, apathy, not wanting to be singled out, not necessarily being more mature than others, and not caring about school as much as teachers might think. Some wanted varied teaching styles, optimistic teachers, connection to the community, and opportunities for creative expression. Several wanted more than their achievement to matter.

Needs are often discussed in the giftedness literature largely in terms of academic challenge. Gifted individuals often use *bored* as a default term when they do not find academics engaging. Kanevsky and Keighley (2003) found that gifted students' boredom reflected moral judgment of inappropriate education; that they sought personal control, choice, challenge, and complexity in their learning; and that they wanted caring teachers. Understandably, parents and teachers may assume that "I'm bored" should be addressed with academic rigor. However, what adults view as *challenge* might not address what the term *bored* masks. School counselors need to stay open to possible contributors, such as a learning disability, extreme family distress, depression, lack of direction for the future, and even fears about not being able to match parents' achievements in adulthood. *Bored* may also reflect conditional acceptance of authority, low English proficiency, heavier reading, no longer having one main teacher, or expecting that teachers should entertain.

Social Concerns

General Fit. Socially, gifted students might have a poor fit with age peers, teachers, administrators, coaches, or directors of activities at school—or with immediate or extended family. Some of the characteristics associated with gifted-

ness, like intensity and sensitivity (Daniels & Piechowski, 2009), may be judged negatively. The further out these students are on a bell curve of cognitive ability, the more likely it is that they have interpersonal difficulties. As a result, they might experience loneliness (Gross, 2004), bullying, ostracism, or rejection (cf. Williams & Nida, 2017). On the other hand, it is also possible that their interpersonal intelligence (Gardner, 2006) is developed enough that they can make solid social connections even if they lack intellectual peers. However, a gifted student's personality may indeed contribute to social and emotional concerns, especially if shyness, impulsivity, lack of tact, hyperactivity, bossiness, anger, aggression, perfectionism, or lack of perspective-taking is an issue.

Disabilities. Learning disabilities can affect the social and emotional development of gifted students (Gilman & Peters, 2018), including limiting their connection to ability peers if the disabilities are not accommodated in advanced classes. Success is possible, perhaps with accommodations, although twice-exceptional students may fear exposure of the disability if they enroll. If frustration accompanies disabilities, distracting behaviors might bring them to a school counselor.

The literature focused on giftedness and disability is often limited to learning disabilities (e.g., Baum et al., 2006; Peterson & Peters, 2021), but bright individuals with physical and emotional disabilities are also twice-exceptional, often referred to as 2e. The cognitive ability of an intellectually gifted child with severe cerebral palsy, paralysis, or speech impairment, for instance, may not be recognized and nurtured at school, and covert bullying and isolation might occur. Anxiety, anger, mood fluctuations, hyperactivity, or compulsivity that does not quite meet criteria for diagnosis, or may be masked by high academic performance and not identified, may contribute to social difficulties and unaddressed concerns. Teachers may refer gifted students with these concerns to school counselors.

Hidden Concerns. A rapid information-processing brain, often recognized with the gifted label, is especially responsive to environmental stimuli, and emotions are related to what is absorbed cognitively. However, whether and how emotions are expressed is related to socialization (Mendaglio, 2007). School counselors and others need to be especially alert to distress among gifted children and teens because heightened sensitivity, asynchronous development, introversion, and a debilitating level of perfectionism may contribute to depression and suicidal ideation (Cross & Andersen, 2016).

Even students who are stellar performers can have hidden concerns. In fact, the central phenomenon in Peterson et al.'s (2009) longitudinal life events study was high stress unconnected to negative life events. Academic challenges were mentioned most often, with peer relationships, transitions to the next school level, college applications, and overcommitment being the next most challenging concerns for the high-achieving sample. Stress levels averaged 2.7, 5.8, and 6.8

(scale of 1–10, with 10 highest), for elementary, middle, and high school, respectively. The mode for high school was 8, and the range extended to 10 for both middle and high school.

Strong Messages. Gifted students may present with concerns related to comments from the adults who are invested in them. Paradoxical messages from parents may be confusing (e.g., "be more social" vs. "have perfect test scores"). Their blaming giftedness for negative behaviors may mean that giftedness is not incorporated into identity (Mahoney et al., 2007).

If high performance is emphasized, achievers may feel one-dimensional; underachievers may move in the opposite direction. Talking only about end products may not only preclude enjoying the process, but also contribute to perfectionism. Insisting on "perfection" may exacerbate already unreasonable self-expectations. If parents overfunction, doing for gifted children and teens what the latter should be doing independently (e.g., "rescuing" them when lunch cards or gym clothes were left at home; advocating for them at school when self-advocacy would likely suffice), dependence and a low sense of responsibility may result. Similarly, overstructuring time might lead to students' inability to approach it creatively. Speaking negatively about "play" may rob a child of an important dimension of childhood.

Bullying

Because bullying often occurs under the radar, school counselors need to stay alert for it. The differentness inherent in giftedness may contribute to being targeted. Peer-group affiliation patterns for students at either end of the ability continuum may contribute to vulnerability (Estell et al., 2009). Psychological androgyny, perhaps reflected in interests that do not fit gender stereotypes (Hébert, 2000), may as well. Peterson and Ray's (2006a, 2006b) national study of gifted eighth graders illuminated several pertinent aspects. Nearly one-third had experienced bullying in kindergarten, with percentages steadily increasing through grade 8 for girls and peaking in grade 6 for boys. Nonphysical bullying was highly distressing. Being bullied, for some, led to wanting to avoid mistakes, an impulse that might exacerbate perfectionistic tendencies. Intelligence helped some to cope (e.g., strategizing, making sense of bullying).

Characteristics Contributing to Needs

Probably all of the various characteristics associated with giftedness in the literature affect how gifted children and teens experience school. Some may generate counseling needs. Some perspectives discussed here come from my clinical work

with gifted youth and their families, including more than 1,400 small-group sessions with gifted adolescents, focused on "growing up." Others are supported by my own and others' research and pertinent clinical work.

Sensitivity and Intensity. Sensitivity is often mentioned first among characteristics. Mendaglio (2007) argued that gifted students are likely to have a heightened response to stimuli that do not affect other kids similarly. That sensitivity influences how developmental or family transitions, unexpected life events, changes, relationships, and sensory stimuli are experienced. When cognitive development far outpaces social and emotional development, educators and parents may not be sympathetic about how it affects school experiences.

Overexcitabilities (Piechowski, 2013) can contribute to problems in the classroom and with relationships. Psychomotor overexcitability may be manifested in extreme need for physical movement. Intellectual overexcitability can frustrate and exhaust teachers and parents. Extreme empathy and intense responses to films, books, and news events about natural disasters, tragedies, and diseases may represent emotional overexcitability. Imaginational overexcitability may be a poor fit in a classroom with rigid rules and no invitation to be creative. With sensory overexcitability, noise may be painful, competing visual stimuli may feel overwhelming, strong smells may provoke a flight reflex, and textures may bring a strong response. Any of these may affect concentration in the classroom. Perhaps no one inquires respectfully about these responses. If children are asked, their responses might not be welcomed. Knowledgeable school counselors can help gifted individuals make sense of their sensitivities and overexcitabilities.

Intensity has also been associated with giftedness (Daniels & Piechowski, 2009). It might make high performance possible but also affect relationships negatively and be a source of high stress related to self-expectations and perceived and actual expectations of others (Peterson et al., 2009). Intensity for both achievers and gifted underachievers may be manifested in extreme responses to perceived injustices or to a difficult life in or outside of school.

Control of Emotions. When gifted students are accustomed to maintaining control with cognitive strengths and verbal skills, extreme emotions may be frightening. However, advanced cognitive ability may also allow emotions to be controlled or even denied—or controlled through social dominance at school (cf. Rimm, 2008), or in tantrums or meltdowns at home. A school counselor may be a rare adult who recognizes and validates distress.

Perfectionism. When gifted students or their parents approach a school counselor about perfectionism, counseling needs might be related to fear of entering unfamiliar territory, such as a "demanding" class. Unreasonable standards, inability to begin or end or enjoy a project, preoccupation with evaluation, fear of error and failure, extreme criticism of self and others, and a high need for con-

trol might also reflect perfectionism, with these negatively affecting relationships, the academic experience, and well-being (Greenspon, 2016; Peterson, 2018a). Somewhat pertinent is that, depending on how students conceptualize intelligence (immutable vs. malleable), they may doubt their ability (Dweck, 2006/2016) and feel inferior to others (Peterson et al., 2009). They also may feel no permission from self or others to chart an independent course for the future.

Intense Idealism. Being able to envision "how things should be" can lead to sadness and frustration. Witnessing or experiencing bullying, watching horrific injustices in news clips or documentaries, or perceiving that a teacher lacks interest in students may provoke despair or strong impulses to right wrongs.

Even young gifted children can experience existential angst as they try to make sense of the world (Webb, 2013). Asynchronous development allows them to apply cognitive precocity to big questions about life, death, meaning, and the universe, but without perspectives based on many years of life experience and emotional development. Parents or teachers might enlist the help of a school counselor when a gifted child or teen despairs.

Change and Loss

A discussion of needs must include attention to change and loss—that is, when something must be left behind. According to an annual parent checklist, at one point in a longitudinal study of life events (Peterson et al., 2009) of generally middle-class gifted children and teens, 105 had experienced 94 deaths in the immediate or extended family, 15 had had a serious illness themselves, 14 had been involved in serious accidents, and 13 had had changes in family with major impact. Negative events in the family, added to the checklist by parents, included mental illness, financial reversal, parental incarceration, sexual abuse, and substance-abuse treatment. All of these made life different from before. However, many of the 48 students who responded to an open-ended questionnaire at graduation said that the most challenging losses were experiencing a romantic break-up, not making a varsity team, being rejected by a preferred university, or physical injury that precluded further talent development (Peterson et al., 2009).

It is important for counselors to consider that all of these experiences involve change and loss. Other losses might be moving away from friends, losing trust in someone, losing a friendship, being estranged from family, or losing innocence, security, or childhood. Given the characteristics associated with giftedness mentioned earlier, the experience of loss might be especially difficult. Asynchronous development may have an impact on response to change/loss/grief, with cognitive strengths applied to make sense of the loss and of extreme emotions that feel "crazy" and out of control. Gifted children might be so concerned about their

parents' grief that they are careful not to express sadness themselves because they want to avoid adding to their parents'. Even multipotentiality, a controversial concept in the field of gifted education (Peterson, 2018a), may threaten gifted students with loss, because they believe they must leave strong interests behind when choosing one college major or career path from many viable options. Pursuing a strong extracurricular interest in middle school may mean leaving a long-term friend behind. A new blended family can mean losing a familiar place in the family hierarchy. However, these losses may not be acknowledged by family, peers, and teachers. School counselors knowledgeable about giftedness can frame such feelings as loss to help bright students grieve those losses.

Developmental Transitions

School counselors may recognize counseling needs connected to gifted students' developmental transitions. Applying a developmental template (i.e., exploring various developmental tasks and possible stuckness for each) and a change-loss framework, when appropriate, can be helpful. At any developmental transition (e.g., moving into adolescence), anxiety may reflect a need for control, as well as sadness over leaving a comfortable developmental stage behind. During these transitions, not knowing the future may also provoke anxiety in students who have low tolerance for ambiguity and uncertainty.

When troubling thoughts related to sexuality arise, gifted students may not have a place to talk about them, may not know that age peers are struggling similarly, and may be reluctant to divulge their fears and discomfort to anyone. Needing to adjust to new peer social modes can also be unsettling, especially when there is a competing need to differentiate from parents. The overlay of giftedness on developmental challenges may exacerbate typical struggles.

Finally, there may be fears about parents and siblings, their parents' relationship, family safety, and college. Gifted high school students have said they are afraid to ask "dumb questions" about social and emotional aspects of college, such as the impact of a new environment, roommate relationships, choice of major, illness when far from home, access to professors, and greater autonomy (Peterson, 2000b, 2020). During developmental transitions, sensitive parents' concerns about their children may reflect memories of their own experiences during the same developmental stage and may actually intensify their children's anxieties.

Entering School. A primary-level gifted child might interact with a school counselor about problems in the classroom. If the child is highly verbal and accustomed to undivided adult attention and uninterrupted conversation, the eager expectation about starting kindergarten may quickly change to frustration and sadness when attention and appreciation for strengths are absent (Rimm, 2008).

Gifted children who have not had enrichment opportunities at home through travel and special programs also are likely to experience an adjustment to the inherently competitive school culture. Some may need to adjust to greater socioeconomic diversity. In addition, small motor skills in writing may not match their brain's rapid information processing. Teachers may evaluate such asynchronicity negatively. Parents also probably experience a developmental transition at this point, feeling a loss of some control over their child's development and being newly concerned that their child's classroom performance reflects on them. Gifted children and their parents may all feel an unaccustomed lack of control.

Early Elementary. That erosion of control continues during the next few years, as peer influence increases and teacher personalities and accommodations matter increasingly. High-functioning parents' anxieties may affect their children, who are sensitive to environmental cues. Parents may be concerned about not doing enough for their gifted children, may pack time outside of school full, may focus incessantly on performance, and may see even small declines in academic performance as catastrophic. During these years, counselors may notice greatly differing scores on standardized tests for some children from year to year, perhaps reflecting complex attitudes toward school or difficult circumstances outside of school.

Adolescence. School counselors can be especially helpful if they keep in mind that characteristics associated with giftedness continue to have impact during adolescence. Highly invested parents may have difficulty adjusting their parenting accordingly, potentially contributing to counseling needs in their children. Insecure parents may thwart their children's attempts to differentiate from them. If communication is constantly focused on academic performance, the inadvertent message may be that *doing* is much more important than *being*—and that love and worth are conditional.

According to Peterson and Rischar's (2000) retrospective study of gifted young adults, children may have serious concerns about sexual orientation even before leaving elementary school. They may be preoccupied with imagined responses of invested adults to their thoughts and feelings, aware of attitudes reflected in teasing at school. In general, sexuality probably occupies late elementary and early middle school gifted kids' thoughts as much as it does for less able peers as they all wonder about sexual behavior, sexual orientation, and gender identity.

Underachievement. Academic underachievement can also be viewed through a developmental lens (Peterson, 2007). When relocation, parents' deployment or unemployment, tragedies, and unsettling life events or circumstances occur, various aspects of development may be affected. These and social challenges may precipitate high achievement in elementary school changing to low achievement in middle school. Parent-teen conflict may consume low achievers' energy during

adolescence. Depression may be a factor. When a high-stress stage of development is eventually left behind, reinvestment in education may result (Peterson, 2001).

Stress and Risk. Some highly able children miss gifted education services because they do not demonstrate their abilities in ways familiar to dominant-culture teachers. Humility and quiet deference to teachers may be valued more in their culture than "showing what you know," which actually may not be valued in their culture (Peterson, 1999). Regardless of circumstances, negative behavior may also argue against referral and identification for a special program when classroom teachers are asked to nominate students whose test scores might have underestimated their abilities. Performance may be uneven on standardized tests from year to year because responsibilities at home are increasing, thicker textbooks and smaller print are discouraging, activities occupy more time, and space and time for homework are in short supply. In an unpublished component of the Peterson et al. (2009) longitudinal study mentioned earlier, 34% of the generally high-achieving, culturally mainstream graduates varied more than 20 percentile points in some core subtests on standardized assessments over time. One can imagine that the scores of gifted students with a poorer fit in school might vary even more.

Counselors may not be asked to refer students for further assessment, as teachers are, but they can be alert to keen insights, intellectual nimbleness, and adept repartee when interacting with students and can request an evaluation by program gatekeepers—regardless of academic record and behavior. Ideally, the available program is multifaceted, not one-size-fits-all, creatively going beyond regularly available curriculum and including attention to social, emotional, and career development, meeting bright kids where they are (Peterson, 2009, 2018b).

Pertinent here, when facilitating a series of small-group discussions with high-risk middle school students whose parents were suspected of abusing substances, Peterson (1997) noticed exceptional insights in some participants. In their school files, she found that 37% of all participants had standardized test scores above the 90th percentile in earlier grades (some at the 98th or 99th) despite distressed, chaotic home situations. A few were adept at manipulation and attention seeking, but most were withdrawn, not social, experiencing depression, experimenting with dangerous behaviors, or having heavy responsibilities in parent-like roles at home. Only one had been invited earlier to participate in a program for gifted children, but he said his mother, dealing with addictions, would not sign the permission form. An eighth-grader wanted to be in chorus, but when she had no transportation to a concert rehearsal, she could no longer participate. She was the only one who had considered college, but the dream was becoming dim.

These early adolescents were resilient and attended school regularly. School provided structure, breakfast, and lunch. Among the issues the study raised were

that highly able children may not be identified for programs, lack of parental advocacy matters, bright students may lack positive adult models, their test scores might be higher in advantaged circumstances, and gifted students must fit programs, not vice versa (Peterson, 1997).

Developmental "Stuckness." Gifted teens can be developmentally "stuck," as discussed in Chapter 26 of this volume, even in high-functioning families. In a study of gifted high school underachievers who became successful as adults (Peterson, 2001), several developmental task accomplishments converged late in college and even in the mid-30s: identity, direction, mature relationship, autonomy, and emotional differentiation through resolving conflict with parents. That convergence was associated with increased motivation for academic work. Both high and low performers among gifted students may experience impasse in any or all key areas of development during the school years, although high achievement habits may help some students maintain a strong academic record despite developmental stuckness (Peterson, 2000a).

In a longitudinal case study (Peterson, 2012, 2014) that explored the developmental impact of trauma, the gifted participant's social, emotional, career, and academic development, from age 15 through 30, were all affected—and stuck at times. Sexual and other physical abuse, social ostracism, and being a scapegoat affected her identity development and emotional well-being. At various points, she had difficulty envisioning a career path and, therefore, the future. Peer relationships were affected. Ongoing emotional entanglements and unresolved conflict made differentiating from family difficult. Premature autonomy, after dropping out of high school, included an abusive relationship for 4 years and depression before dropping out of college for a time. Although post-traumatic stress disorder (PTSD) would likely have long-term effects and continue to affect responses to stressful situations (Woller, 2006), her developmental progress reflected that intelligence and being proactive can contribute to resilience (Higgins, 1994). By her mid-20s, she had accomplished all major young adult developmental tasks. By the end of the study, she had a master's degree, a solid marriage, two healthy children, career success, and resolution of conflict with one parent.

Grobman (2006), a psychiatrist and psychotherapist, suggested that the power and attention that precocious talent can generate has implications for mental health. He saw a considerable number of individuals with great talent and observed that, as they moved into young adulthood, they paradoxically experienced anxiety and sadness, reflecting a kind of developmental stuckness and, with their talents, underachievement.

Strategies

Only a few studies of specific strategies for counseling gifted children and teens, such as small-group discussion (Jen et al., 2017; Peterson, 2013; Peterson & Lorimer, 2011, 2012) and students' perceptions of interactions with school counselors (Wood, 2010), are available to guide practice. However, evidence-based approaches applied with the general population are available in reputable online databases and might be effective with gifted individuals, although the idiosyncratic nature of giftedness means that strategies need to be adapted accordingly (Pfeiffer & Burko, 2016).

The Peterson Proactive Developmental Attention (PPDA) model (Peterson & Jen, 2018) offers broad guidance for addressing social and emotional development across school levels. Because bright kids often hide distress and because educators may erroneously assume that compliant behavior and high achievement reflect well-being, the *proactive* component of the PPDA argues that all gifted students can benefit from psychoeducational information and opportunities to interact with highly able peers about social and emotional development. Gifted education programs too often do not include those elements. The *development* component normalizes developmental struggles through purposeful interaction with bright peers, who develop expressive language through topic-focused small-group discussion and make sense of unsettling feelings and behaviors. The *attention* component does not wait for problems to become crises and communicates that the "whole child" matters, not just academic performance. The PPDA model acknowledges that appealing to both cognitive strengths and emotional complexity (Peterson, 2015) is important when working with high-ability students. Several strategies can help school counselors differentiate approaches for gifted students:

- Commend them for being smart enough to talk with a counselor.
- Consider which specific developmental challenges they might be struggling with.
- Consider the whole child, not just the high-performing or underperforming aspect.
- Remember their age. Asynchronous development can contribute to distress.
- Be a nonexpert, learning *from* them how they make sense of their world.
- Watch for opportunities to give credible feedback about strengths, including their ability to articulate concerns. Avoid empty, superficial "cheerleading."
- Respect their struggles. Struggles have value.
- Focus on enhancing personal agency. Resist impulses to rescue.

- Note aspects of resilience that apply to them and offer these to generate hope.
- Provide psychoeducational information, when appropriate, to help them make sense of feelings and behaviors.
- Consider bibliotherapy (Hébert, 2020), appealing to cognitive strengths.
- Help them connect to ability peers through small-group experiences (Peterson, 2020).
- Help them develop expressive language so that they can "put words on" emotions in the present moment. Even at young ages, they may be intensely future-focused.
- Avoid language used stridently by invested parents, grandparents, teachers, and coaches regarding achievement, underachievement, and behavior.
- Incorporate play into counseling. Some gifted children may not know how to play.
- Help highly invested parents set appropriate social and emotional boundaries between themselves and their children.
- Beware of assuming that more-and-faster curriculum is appropriate for all gifted students—and the remedy for all problems.
- Appreciate that profound giftedness is an extra exceptionality and that parenting gifted children with extreme levels of intelligence may be extremely challenging.

Many of these guidelines apply to most student populations; however, school counselors should remember that the guidelines apply to gifted students as well. Basic counseling tenets also apply to gifted students. A few of these are detailed in the following sections.

Small-Group Discussion

Gifted students can benefit from interacting with intellectual peers in prevention-oriented small-group discussion focused on social and emotional development, not on academics—normalizing feelings and behaviors and learning from each other (Peterson, 2018b). A school counselor and a gifted education teacher might cofacilitate a series of group discussions as affective curriculum for pull-out groups, with mutual professional gains a side benefit. Ideally, the content comes from the group members, but psychoeducational information from the facilitator is also an option now and then. Optimal group size, with time for everyone at that age level to contribute, is four to six for children in elementary school and up to eight for adolescents, with students grouped according to grade level because common social and emotional concerns are likely.

Focusing on a developmental topic (e.g., image, stress, expectations, encouragers and discouragers, personal strengths, intensity, perfectionism, anger, anxiety, fear, mood swings, competition, arrogance, anticipating change, dark thoughts, personal fit in a career, meeting an academic nemesis, life satisfaction, maturity, relationships with teachers, bullying, sexual harassment, endings) at each meeting provides a defensible, semistructured curriculum in the form of in-depth discussion. Paper-and-pencil activities and physical movement can vary the format. The detailed introduction to *Get Gifted Students Talking* (Peterson, 2020) is actually a short course in proactive, developmental small-group facilitation, followed by background information and suggested questions for 76 developmental sessions.

Achievers and underachievers should be mixed per group, whenever possible, so that they can find common ground around developmental challenges. Shy, outgoing, rebellious, perfectionistic, hyperactive, sad, productive, high-risk, and profoundly gifted students can all become acquainted with each other and share developmental struggles. Topics like those listed previously can also be used for classroom-size guidance, adjusted according to social and emotional developmental level, as well as for cluster-grouped gifted students. Letting the topic be a surprise for each meeting (i.e., telling the students, "Trust me") avoids having students prejudge topics as "not interesting" and then decide not to attend, if attendance of voluntary.

Psychoeducational Information

Psychoeducational information usually appeals to gifted children and teens, not only because of their cognitive ability, but also because parents and educators might not provide it or encourage them to find it. Even in early elementary school, counselors can refer to characteristics associated with giftedness to help gifted children understand and deal with asynchronous development, their place on a bell curve, extreme sensory responses, and perspective-taking, for example.

Resilience. Credible comments about observed indicators of resilience (e.g., Higgins, 1994) can give gifted youth hope for both present and future. Researchers have associated problem-solving skills, the ability to gain adult attention, self-care, a positive vision of the future, being alert and autonomous, seeking novel experiences, a caring adult supporter, positive role models outside of the home, a positive self-concept, social support, high intelligence, and not blaming self for family problems with being able to withstand even extended adversity. A statement like "I'm confident that you'll survive this because you've got important strengths, like being a good problem solver, having a good mind, and looking toward the future" might offer crucial support during a difficult adolescence. Hébert's (2018) qualitative study of five talented young men who overcame deep,

complex adversity during their school years underscores the importance of a caring adult in developing resilience—and talent. All five had personal characteristics like perseverance, practical intelligence, and social skills, and they had talent development opportunities that helped them cope with stressors. But the ongoing support of one or more teachers, investing time and energy, clearly helped to sustain them. School counselors, too, can have that role, formally or informally, for gifted children or teens struggling with adversity.

Trauma. Counselors can call attention to factors of resilience when they observe symptoms of PTSD, but psychoeducational information about PTSD, the potential impact of characteristics associated with giftedness on how negative situations are experienced (Peterson, 2012), and how sometimes those characteristics are misdiagnosed (Webb et al., 2016) might also be helpful. A school counselor can help a traumatized student make sense of hypervigilance, intense and confusing emotions and behaviors, and control issues (cf. Wessa et al., 2006). However, because heavy caseloads (the average U.S. counselor-to-student ratio is 1:424; American School Counselor Association, 2021) preclude long-term therapy in schools, a referral to an outside resource is likely warranted. Providing information about what to expect from helping professionals in the community may help anxious gifted students be amenable to being helped. Nonschool therapists, counselors, and psychologists might believe that peer aggression, exclusion and ostracism, rumor-spreading, cyberbullying, or witnessing or experiencing face-to-face bullying, for example, do not meet criteria for trauma. However, school counselors should take these experiences seriously (as possible subthreshold trauma) and apply basic counseling tenets when responding to them.

Dabrowski's (see Mendaglio, 2008) theory of positive disintegration can be useful for helping gifted kids feel hope in the midst of struggle. Dabrowski theorized that struggle has function, and that gifted persons have potential for advanced development as a result of it, instead of negatively disintegrating into poor mental health.

Career. Educators and counselors might assume that gifted youth gain information about college and career simply by living in a home where education is valued and parents have successful careers. Unfortunately, that may not be the case, and both high achievers and underachievers, perhaps hiding anxiety about the future, may be hungry for guidance.

Young gifted children can be concerned about a career much earlier than others their age (Hébert & Kelly, 2006). They may understand what the work world involves, have intense anxiety about future challenges, and worry about choosing from many possible career paths. Career guidance by a school counselor with small groups homogeneous in ability can help bright students avoid premature foreclosure on a career path fed by their own or invested adults' low

tolerance for ambiguity. Gifted students can learn that they do not have to decide during the K–12 years and will have exposure to new directions during college. Perfectionistic students can learn that it is not uncommon for college students to change majors (Peterson, 2000a) and for adults to change careers. Career fit with personality, needs, interests, and values is an appropriate focus for any age level. For instance, gifted students with interpersonal, entrepreneurial, and artistic strengths might find teaching to be a good-fit career, even though teachers and families encourage other directions for financial reasons. Arranging a field trip for middle and high school students to see engineers in the workplace might help them envision themselves in a context few students have ever observed. Academic underachievers should be included in these kinds of activities. Underachievers might actually be more actively exploring identity, thinking more independently, and struggling more with finding career direction than are their high-achieving counterparts.

Underachievement. School counselors may see more gifted underachievers than high achievers for concerns, through referrals, but without high grades to indicate intellectual strengths, the giftedness might be missed. Looking at elementary school performance and standardized ability or achievement test scores can help identify gifted underachievers. With psychoeducational information, such as the following, school counselors might offer hope to both them and their parents, generating motivation to achieve academically.

In a rare 4-year follow-up study of high and low achievers (Peterson, 2000a), 20% of underachievers improved before high school graduation, and 55% of those continued to improve in college; 41% of all underachievers had ACT composite scores above the 90th percentile; 87% went to college; 41% of all underachievers improved in college, and 26% became achievers; and 52% had 4 college years 4 years later, including 56% of extreme underachievers. Underachievers' somewhat lower ACT or SAT scores (93rd percentile for achievers vs. 87th for underachievers) did not preclude a college education. These findings caution against predicting the future based on low performance at any one stage of development. In one longitudinal study of high-risk gifted teens after high school (Peterson, 2002), accomplishing developmental tasks was related to increased motivation for academic work. A developmental perspective is an optimistic alternative to the strident, judgmental language that underachievers too often hear.

Conclusion

Gifted youth face universal developmental challenges, but characteristics associated with giftedness affect how they *experience* development. Knowledgeable

school counselors recognize that gifted and other children and adolescents have similar basic needs, but the overlay of giftedness adds multiple layers of complexity to these needs, and concerns may be hidden. Both achievers and underachievers may experience developmental stuckness, and both may believe that invested adults are focused only on their performance or nonperformance. Basic counseling tenets can be applied when counseling gifted students, but approaches should be differentiated, recognizing assets and burdens and special needs inherent in giftedness.

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About the Editors

Tracy L. Cross, Ph.D., holds an endowed chair, Jody and Layton Smith Professor of Psychology and Gifted Education, and is the executive director of the Center for Gifted Education and the Institute for Research on the Suicide of Gifted Students at William & Mary. Previously he served Ball State University as the George and Frances Ball Distinguished Professor of Psychology and Gifted Studies, the executive director of the Center for Gifted Studies and Talent Development, and the Institute for Research on the Psychology of Gifted Students. For 9 years, he served as the Executive Director of the Indiana Academy for Science, Mathematics, and Humanities, a residential high school for intellectually gifted adolescents. He has published more than 175 articles, book chapters and columns, and has published 13 books. Dr. Cross has made more than 300 presentations at conferences. He has edited seven journals, five in the field of gifted studies, including *Gifted Child Quarterly*, *Journal for the Education of the Gifted, Roeper Review*, and *The Journal of Secondary Gifted Education* (now called *Journal of Advanced Academics*). He has been president of the National Association for Gifted Children (NAGC) and twice of The Association for the Gifted. Dr. Cross received the Distinguished Service Award from both The Association for the Gifted of the Council for Exceptional Children and NAGC, the Early Leader and Early Scholar Awards and the Distinguished Scholar Award from NAGC, four Outstanding Research on Intelligence or Intellectual Giftedness awards from

the Mensa Education and Research Foundation, the Inaugural Diversity Award from the NAGC Network on Gifted Gay, Lesbian, Bisexual, Transgender, and Questioning, the Lifetime Achievement Award from the MENSA Education and Research Foundation, and the 2020 Palmarium Award.

Jennifer Riedl Cross, Ph.D., is Director of Research at the William & Mary Center for Gifted Education. Dr. Cross is a member of the leadership team of the W&M Institute for Research on the Suicide of Gifted Students. She is active in suicide prevention efforts on the campus of William & Mary, coleading the Suicide Prevention Coalition and the campuswide Campus Connect gatekeeper training program. She and Dr. Tracy L. Cross coauthored the second edition of the book *Suicide Among Gifted Children and Adolescents* and an article on clinical and mental health issues for a special issue of the *Journal for Counseling and Development* on gifted individuals. The first edition of the *Handbook for Counselors Serving Students With Gifts and Talents,* coedited by the Drs. Cross, received the 2012 Texas Association for the Gifted and Talented Legacy Book Award in the Scholar category. As a social psychologist, Dr. Cross has studied peer relationships, with a particular focus on adolescent crowds. This interest came about through her research on the development of a social dominance orientation, an individual's preference for hierarchical or egalitarian intergroup relations. Her passion for social justice has led to research on high-ability students from low-income backgrounds and the barriers to their education. Dr. Cross guest edited, with Dr. James Borland, a special issue of *Roeper Review* on gifted education and social inequality. Her research in the field of gifted education emphasizes its social aspects, from individual coping with the stigma of giftedness to attitudes toward giftedness and gifted education. Dr. Cross's cross-cultural research on the social experience of gifted students has implications for counselors, parents, and educators who wish to support students' positive psychosocial development.

About the Authors

Cheryll M. Adams, Ph.D., is the Director Emerita of the Center for Gifted Studies and Talent Development, Ball State University. She was a classroom teacher for 15 years. She currently teaches online courses in gifted education and has presented widely in the field. She has authored or coauthored numerous publications in professional journals, as well as several books and book chapters. She wrote, directed, and was a principal investigator on three Javits grants. She is a former member of the Board of Directors of the National Association for Gifted Children (NAGC) and a past president of The Association for the Gifted (Council for Exceptional Children) and the Indiana Association for the Gifted. She is a past Chair of the NAGC Professional Standards Committee and the Research and Evaluation Network. She has received the Early Leader Award, Distinguished Service Award, and President's Award from NAGC.

Don Ambrose, Ph.D., is professor of graduate education at Rider University in Lawrenceville, NJ, and editor of the *Roeper Review.* He has initiated and led numerous interdisciplinary scholarly projects involving eminent researchers and theorists from many fields throughout academia. Examples of topics addressed by the many books he has published include interdisciplinary explorations of creative intelligence; the moral-ethical dimensions of giftedness; 21st-century globalization and its effects on creative intelligence; innovative, holistic education

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Edward R. Amend, Psy.D., a clinical psychologist at The Amend Group in Lexington, KY, is licensed to practice in Kentucky and Ohio. Dr. Amend focuses on the social, emotional, and educational needs of gifted youth, adults, and their families. He coauthored two award-winning books, *A Parent's Guide to Gifted Children* and *Misdiagnosis and Dual Diagnoses of Gifted Children and Adults* (2nd ed.), and has authored many articles, book chapters, and columns about gifted children. He presents locally and nationally on topics related to the needs of gifted children, and he is actively involved with NAGC's Parent Editorial Content and Advisory Board, Supporting Emotional Needs of the Gifted's Professional Advisory Committee, *The G Word* film's Advisory Board, and the Kentucky Association for Gifted Education.

Lori Andersen, Ph.D., is an assistant professor at the University of Hawai'i at Mānoa. She completed her Ph.D. in Educational Policy, Planning and Leadership at William & Mary, specializing in gifted education. Prior to her graduate studies, she taught students with gifts and talents in advanced physics. Her outstanding teaching has been recognized by the National Science Teachers Association VSP Vision of Science Award in 2008 and the Radio Shack National Teacher Award in 2003. Dr. Andersen researches science teaching and learning, as well as professional development. Her awards include second-place Dissertation Award in 2014 and the Doctoral Student Award in 2013 from the National Association for Gifted Children, and The Armand J. And Mary Faust Galfo Education Research Fellowship in 2012–2013. Her publications in gifted education focus on gifted students' motivation for and disidentification with science.

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Lorna Bryant, Ed.D., is dedicated to identifying the best educational options for children regardless of geographic, socioeconomic, or other circumstances, and has a particular interest in the needs of twice-exceptional students. Lorna has worked as a middle and high school English and history teacher, cross country coach, and gifted teacher and program administrator. She also worked for Upward Bound at the University of Arkansas, a program that assists at-risk high school students in preparing for postsecondary success. Recognizing the impact that technology can have on student learning, in 2008 Lorna began working for K12 Inc. (the country's largest provider of online content and services). In her current role, she partners with school leaders and agencies to facilitate the launch and oversee the operations of full-time online and blended school options around the country and abroad. Lorna earned her bachelor's degree in English education and master's degree in gifted education from Arkansas Tech University. She earned her doctorate in educational administration and supervision (with a coemphasis in gifted education) from the University of Arkansas, Little Rock.

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Laurence J. Coleman, Ph.D., prior to his passing in 2013, was the Daso Herb Professor of Gifted Education at the University of Toledo. He was past editor of the *Journal for the Education of the Gifted* and taught courses in theoretical analysis, gifted education, and qualitative inquiry. Among his many professional activities, he was proud of creating an innovative model of teaching as a talent; building the Summer Institute for Gifted Children in 1980, which has been "taken over" by the original students and is still in operation as the Appalachian Institute for Creative Learning; receiving the Distinguished Scholar award from the National Association for Gifted Children and the Outstanding Service Award from The Association for the Gifted of the Council for Exceptional Children; publishing *Being Gifted in School* with Tracy L. Cross and *Nurturing Talent in High School*; and directing a longitudinal U.S. Department of Education study, "Accelerating Achievement in Math and Science in Urban Schools." Dr. Coleman's scholarly interests centered around the experience of being gifted, passion for learning, and teacher thinking.

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for his research on gender differences in high abilities, an award from *Gifted Child Quarterly* in 1994 for best article of the year, and another Mensa award in 1998 for his Differentiating Model of Giftedness and Talent. In 1996, he received the Distinguished Scholar Award from the National Association for Gifted Children "for significant contributions to the field of knowledge regarding the education of gifted individuals." Special issues of the *Journal for the Education of the Gifted* (1999, Vol. 22, No. 2), *High Ability Studies* (2004, Vol. 15, No. 2), and *Talent Development and Excellence* (2011, Vol. 3, No. 1) have been devoted to his theoretical work.

Erin S. Gelgoot, Ph.D., is a credentialed school psychologist and a doctoral graduate of the School Psychology Program at the University of California, Berkeley. She has worked with academically talented youth through her research and as an academic counselor. Her research is focused on the role of technology in the social and academic development of youth. In addition, her areas of expertise include online social support, computer-mediated communication, flipped classrooms, and pediatric oncology and school reintegration.

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Michael M. Piechowski, Ph.D., author of *"Mellow Out," They Say. If I Only Could* and *Living With Intensity* (with S. Daniels), was born in Poland. Dr. Piechowski received his Ph.D. from the University of Wisconsin–Madison. He met Dr. Kazimierz Dabrowski at the University of Alberta, Edmonton, and collaborated with him for 8 years. He is a contributor to the *Handbook of Gifted Education* and the *Encyclopedia of Creativity*. Since 2002, he has been involved with the Yunasa summer camp for highly gifted youth, organized by the Institute for Educational Advancement. He lives in Madison, WI.

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