Ch 4 (p. 31+)
Ch 6 (p. 51+)
Conclusion (p. 267+)

4 ASYNCHRONOUS DEVELOPMENT

by **Linda Kreger Silverman, Ph.D.**

Asynchrony means being "out-of-sync." Gifted children are more advanced mentally than others of their chronological age, and most have disparities between their intellectual abilities (as indicated by mental age) and their physical abilities (closely aligned to chronological age). Asynchrony intensifies as IQ increases, as this indicates greater discrepancy between the child's mental and chronological ages. To have the mental maturity of a 14-year-old and the physical maturity of an 8-year-old poses a set of emotional and social challenges analogous to those that face the child with a 14-year-old body and an 8-year-old mind. Hence, asynchrony with chronological peers is an existential dilemma for gifted children, which often creates social and emotional stress (Silverman, 1993). Asynchrony is also amplified by large discrepancies between a child's strengths and weaknesses. With increased asynchrony come greater social and emo-

tional adjustment problems. Thus, exceptionally gifted children (see Gross, this volume) and twice-exceptional children are especially at risk for social and emotional difficulties related to asynchronous development (Moon, this volume; Olenchak & Reis, this volume).

Asynchronous Development: A Phenomenological Definition of Giftedness

Asynchronous development is a phenomenological, rather than a utilitarian, perspective; it focuses on the conscious experience of the gifted, rather than on their usefulness to society. Roeper (1982) characterized giftedness as "a greater awareness, a greater sensitivity, and a greater ability to understand and to transform perceptions into intellectual and emotional experiences" (p. 21). Similarly, the Columbus Group (1991) defined giftedness as "*asynchronous development* in which advanced cognitive abilities and heightened intensity combine to create inner experiences and awareness that are qualitatively different from the norm."

The definition of giftedness as asynchronous development highlights the complexity of the individual's thought process, the intensity of sensation, emotion, and imagination, and the extraordinary awareness that results from this fusion. Asynchrony also involves uneven development and feeling out of step with societal norms. All of these factors create social and emotional vulnerabilities and require differentiated parenting, teaching, and counseling to promote optimal development in gifted individuals (Columbus Group, 1991).

Dyssynchrony

Uneven development of gifted children has been noted by numerous clinicians and researchers (Altman, 1983; Delisle, 1990; Gowan, 1974; Hollingworth, 1942; Kerr, 1991; Kline & Meckstroth, 1985; Manaster & Powell, 1983; Munger, 1990; Roedell, 1984; Schetky, 1981; Sebring, 1983; Terrassier, 1985; Webb, Meckstroth, & Tolan, 1982). Terrassier coined the term *dyssynchrony* to refer to the psychological and social ramifications of uneven development in gifted children. 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, p. 265).

According to Terrassier (1985), dyssynchrony has two aspects: internal and social. *Internal* dyssynchrony refers to disparate rates of intellectual, psychomotor, and affective development within the individual. For example, children who can read before they can write experience dyssynchrony between their receptive language skills and expressive physical writing skills, which can create great frustration. *Social* dyssynchrony occurs when children feel out of step with their social context, as when gifted children are placed in a school class by chronological, rather than mental, age and so are cognitively out of sync with their classmates.

Hence, dyssynchrony is similar to asynchrony and can be used to refer to similar phenomena. However, the disadvantage of the term *dyssynchrony* is that its prefix *dys* means hard, bad, or difficult. It has pathological overtones. The term *asynchrony* is less value-laden and more useful for conveying the positive cognitive and emotional potentials that exist when high intelligence combines with great sensitivity. In addition, asynchrony incorporates Dabrowski's notion of the intensities (overexcitabilities) that characterize the gifted personality throughout the lifespan (Dabrowski & Piechowski, 1977). There is considerable empirical research substantiating the presence of these intensities in gifted children and adults (e.g., Ackerman, 1997; Gallagher, 1985; Schiever, 1985). For these reasons, asynchrony is a better term to use when discussing the phenomenological experience of giftedness.

Asynchronous Development as a Conceptual Framework

Asynchrony has deep historical roots. Leta Stetter Hollingworth, the foremother of our field, viewed giftedness as a set of complex psychological issues arising out of the disparities

between these children's mental and chronological ages (Grant & Piechowski, 1999).

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, and the adjustment becomes easier with every additional year of age. The years between 4 and 9 are probably the most likely to be beset with the problems mentioned (Hollingworth, 1931, p. 13).

Terman (1931) recognized this issue, as well:

> Precocity unavoidably complicates the problem of social adjustment. The child of eight years with a mentality of twelve or fourteen is faced with a situation almost inconceivably difficult. In order to adjust normally such a child has to have an exceptionally well-balanced personality and to be well neigh a social genius. The higher the IQ, the more acute the problem. (p. 579)

These early observations about the social difficulties that asynchrony creates for exceptionally gifted children have been substantiated by more recent research (see Gross, this volume).

Asynchronous development provides a useful conceptual framework to explain many of the existential dilemmas faced by the gifted. It is intensely frustrating when one's awareness outstrips one's emotional control (Hollingworth, 1931; Silverman, 1993, 1997). The construct is particularly germane to those who have been labeled "twice exceptional." When giftedness is equated with high achievement in school, gifted children with learning disabilities fail to be recognized and included. However, through the lens of asynchrony, it becomes apparent that twice-exceptional children are the ones most in need of special provisions. Extreme asynchronous development intensifies their social and emotional issues.

Research on Asynchronous Development

The vast majority of the literature on asynchrony relies on clinical observations. This is fitting, as the concept was born from psychological observations of gifted individuals and intended to describe their phenomenological experience. But, there is some empirical research on this concept. The first to study the emotional and social adjustment of gifted children, Hollingworth (1930a) established that, the farther removed the child is from the average in intelligence, the more pressing his or her adjustment problems become. In Hollingworth's most notable experimental study of social adjustment which employed the Bernreuter Inventory of Personality, she found gifted adolescents to be much less neurotic, much more self-sufficient, and much less submissive than nongifted adolescents (Hollingworth & Rust, 1937). However, as IQ increased, so did difficulties with peer relations (Hollingworth, 1930a, 1930b, 1931).

As noted above, the most asynchronous children are twice exceptional, as they have the largest disparities in their development. For example, many have extraordinary visual-spatial strengths, combined with auditory-sequential weaknesses in reading, writing, spelling, and calculation, which prevent them from being seen as gifted within achievement-based school contexts (Silverman, 2000, 2001). Similarly, gifted children with AD/HD are asynchronous with their chronological peers on two dimensions. Like other gifted children, they are more advanced than their chronological peers cognitively, but, unlike other gifted children, they are less advanced than their age peers in social, emotional, and motivational development (Kaufmann & Castellanos, 2000). Dual asynchronous development in opposite directions creates numerous social and emotional difficulties for gifted children with AD/HD (Moon, Zentall, Grskovic, Hall, & Stormont-Spurgin, 2001).

Conclusion

In conclusion, while some empirical research exists on the social and emotional impact of the discrepancies in the cognitive profiles of gifted learning-disabled children (Schiff, Kaufman, & Kaufman, 1981) and discrepancies between the cognitive profiles of exceptionally gifted children and their same age peers (Gross, this volume), the complete construct of asynchronous development has not yet been

studied systematically. It may be some time before empirical research catches up with the informed observations of psychologists devoted to understanding the emotional lives of gifted children. In the meantime, asynchronous development offers a useful conceptual framework for understanding many of the social and emotional issues faced by these children because of their differences from the norm.

References

Ackerman, C. M. (1997). Identifying gifted adolescents using personality characteristics: Dabrowski's overexcitabilities. *Roeper Review, 19*, 229–236.

Altman, R. (1983). Social-emotional development of gifted children and adolescents: A research model. *Roeper Review, 6*, 65–68.

Columbus Group. (1991, July). Unpublished transcript of the meeting of the Columbus Group, Columbus, OH.

Dabrowski, K., & Piechowski, M. M. (1977). *Theory of levels of emotional development* (Vols. 1 & 2). Oceanside, NY: Dabor Science.

Delisle, J. R. (1990). The gifted adolescent at risk: Strategies and resources for suicide prevention among gifted youth. *Journal for the Education of the Gifted, 13*, 212–228.

Gallagher, S. A. (1985). A comparison of the concept of overexcitabilities with measures of creativity and school achievement in sixth grade students. *Roeper Review, 8*, 115–119.

Gowan, J. C. (1974). *Development of the psychedelic individual.* Northridge, CA: Gowan.

Grant, B. A., & Piechowski, M. M. (1999). Theories and the good: Toward child-centered gifted education. *Gifted Child Quarterly, 43*, 4–12.

Hollingworth, L. S. (1930a). Personality development of special class children. *University of Pennsylvania Bulletin. Seventeenth Annual Schoolmen's Week Proceedings, 30*, 442–446.

Hollingworth, L. S. (1930b). Playmates for the gifted child. *Child Study, 8*, 103–104.

Hollingworth, L. S. (1931). The child of very superior intelligence as a special problem in social adjustment. *Mental Hygiene, 15*(1), 1–16.

Hollingworth, L. S. (1942). *Children above 180 IQ Stanford–Binet: Origin and development.* Yonkers-on-Hudson, NY: World Book.

Hollingworth, L. S., & Rust, M. M. (1937). Application of the Benreuter Inventory of Personality to highly intelligent adolescents. *Journal of Psychology, 4*, 287–293.

Kaufmann, F., & Castellanos, F. X. (2000). Attention Deficit/Hyperactivity Disorder and gifted students. In K. A. Heller, F. J. Mönks, R. J. Sternberg, & R. F. Subotnik (Eds.), *International handbook of giftedness and talent* (2nd ed., pp. 621–632). Amsterdam: Elsevier.

Kerr, B. A. (1991). *A handbook for counseling the gifted and talented.* Alexandria, VA: American Association for Counseling and Development.

Kline, B. E., & Meckstroth, E. A. (1985). Understanding and encouraging the exceptionally gifted. *Roeper Review, 8*, 24–30.

Manaster, G. J., & Powell, P. M. (1983). A framework for understanding gifted adolescents' psychological maladjustment. *Roeper Review, 6*, 70–73.

Moon, S. M., Zentall, S., Grskovic, J., Hall, A., & Stormont-Spurgin, M. (2001). Emotional, social, and family characteristics of boys with AD/HD and giftedness: A comparative case study. *Journal for the Education of the Gifted*, 24, 207–247.

Munger, A. (1990). The parent's role in counseling the gifted: The balance between home and school. In J. VanTassel-Baska (Ed.), *A practical guide to counseling the gifted in a school setting* (2nd ed., pp. 57–65). Reston, VA: Council for Exceptional Children.

Roedell, W. C. (1984). Vulnerabilities of highly gifted children. *Roeper Review, 6*, 127–130.

Roeper, A. (1982). How the gifted cope with their emotions. *Roeper Review, 5*(2), 21–24.

Schetky, D. H. (1981). A psychiatrist looks at giftedness: The emotional and social development of the gifted child. *G/C/T, 18*, 2–4.

Schiever, S. W. (1985). Creative personality characteristics and dimensions of mental functioning in gifted adolescents. *Roeper Review, 7*, 223–226.

Schiff, M. M., Kaufman, A. S., & Kaufman, N. L. (1981). Scatter analysis of WISC-R profiles for learning disabled children with superior intelligence. *Journal of Learning Disabilities, 14*, 400–404.

Sebring, A. D. (1983). Parental factors in the social and emotional adjustment of the gifted. *Roeper Review, 6*(2), 97–99.

Silverman, L. K. (1993). Counseling needs and programs for the gifted. In K. A. Heller, F. J. Mönks, & A. H. Passow (Eds.), *International handbook of research and development of giftedness and talent* (pp. 631–647). Oxford, England: Pergamon.

Silverman, L. K. (1997). The construct of asynchronous development. *Peabody Journal of Education, 72*(3–4), 36–58.

Silverman, L. K. (2000). The two-edged sword of compensation: How the gifted cope with learning disabilities. In K. Kay (Ed.). *Uniquely gifted: Identifying and meeting the needs of twice exceptional learners* (pp. 153–159). Gilsum, NH: Avocus.

Silverman, L. K. (2001). *Upside-down brilliance: The visual-spatial learner.* Unpublished manuscript.

Terrassier, J-C. (1985). Dyssynchrony-uneven development. In J. Freeman (Ed.). *The psychology of gifted children* (pp. 265–274). New York: Wiley.

Terman, L. M. (1931). The gifted child. In C. Murchison (Ed.), *A handbook of child psychology* (pp. 568–584). Worcester, MA: Clark University Press.

Webb, J. T., Meckstroth, E. A., & Tolan, S. S. (1982). *Guiding the gifted child: A practical source for parents and teachers.* Columbus: Ohio Psychology Press.

Robinson, N. M., & Noble, K. D. (199
adjustment of gifted children. In M
Walberg (Eds.), *Handbook of special*
pp. 57–76). Oxford: Pergamon Press
Shore, B. M., Cornell, D. G., Robinson,
practices in gifted education. New Yor
Silverman, L. K. (1993). The gifted
Counseling the gifted and talented (pl
Sowa, C. J., & May, K. M. (1997). Expanding Lazarus and Folkmans paradigm to the social and emotional adjustment of gifted children and adolescents (SEAM). *Gifted Child Quarterly, 41*, 36–43.
Sternberg, R. J., & Davidson, J. E. (Eds.). (1986). *Conceptions of giftedness*. Cambridge: Cambridge University Press.
Tomchin, E. M., Callahan, C. M., Sowa, C. J., & May, K. M. (1996). Coping and self-concept: Adjustment patterns in gifted adolescents. *Journal of Secondary Gifted Education, 8*, 16–27.
Tomkins, S. (1963). *Affect, imagery, consciousness* (Vol. 1). New York: Springer.
Webb, J. T. (1993). Nurturing social-emotional development of gifted children. In K. A. Heller, F. J. Mönks, & A. H. Passow (Eds.), *International handbook of research and development of giftedness and talent* (pp. 525–538). Oxford: Pergamon Press.
Weisse, D. E. (1990). Gifted adolescents and suicide. *School Counselor, 37*, 351–358.

6 THE APPLICATION OF DABROWSKI'S THEORY TO THE GIFTED

by **Kevin J. O'Connor, Ed.M.**

Many gifted children experience high levels of intensity and sensitivity and may appear at odds with their peers. They may question their "normality" or have it questioned by parents and teachers. Piechowski (1997) has suggested that this line of inquiry may extend into adulthood, as many gifted adults feel the same pressure to be "normal" and continue to question their potential, possibilities, and personality ideal. Dabrowski's (1964) Theory of Positive Disintegration has been discussed as one way of understanding the social and emotional development of gifted children. Relatively little research has addressed the use of Dabrowski's work with gifted students; however, the studies that have been completed indicate that this may be a promising direction for consideration of the unique social and emotional characteristics that some gifted children and adults may exhibit.

Dabrowski's Theory

Dabrowski's theory is based on the belief that emotional development is the most essential dimension of human life (Grant & Piechowski, 1999). The theory defines five levels of personality development, explains the process by which development occurs along these levels, and identifies individual characteristics that equate to developmental potential.

Dabrowski's pentatonic levels represent the mapping of human personality, or emotional development, along a continuum from low (egocentric) to high (altruistic). The levels are in ascending order, with the higher levels representing individuals whose personality is defined by a hierarchy of altruistic values. Piechowski (1997) characterized individuals at each of Dabrowski's levels as follows:

> *Level I: Primary Integration.* Egocentrism prevails. A person at this level lacks the capacity for empathy and self-examination. When things go wrong, someone else is always to blame; self-responsibility is not encountered here. . . .
>
> *Level II: Unilevel Disintegration.* Individuals are influenced primarily by their social group and by mainstream values . . . They often exhibit ambivalent feelings and indecisive flip-flop behavior because they have no clear-cut set of self-determined internal values. Inner conflicts are horizontal, a contest between equal, competing values. . . .
>
> *Level III: Spontaneous Multilevel Disintegration.* The person develops a hierarchical sense of values. Inner conflict is vertical, a struggle to bring up one's behavior to higher standards. There is a dissatisfaction with what one is, because of a competing sense of what one could and ought to be (personality ideal). . . .
>
> *Level IV: Organized Multilevel Disintegration.* Individuals are well on the road to self-actualization. They have found a way to reach their own ideals, and they are effective leaders in society. They show high levels of responsibility, authenticity, reflective judgment, empathy for others, autonomy of thought and action, self-awareness. . . .
>
> *Level V: Secondary Integration.* The struggle for self-mastery has been won. Inner conflicts regarding the self have been resolved through actualization of the personality ideal. Disintegration has been transcended by the integration of one's values into one's living and being. (p. 374).

Development along Dabrowski's levels comes through a process of lower level cognitive-emotional structures being dismantled and replaced by higher level structures. Dabrowski referred to this process as "positive disintegration" to emphasize the beneficial aspects of breaking down inferior and reconstructing superior personality attributes. The hallmark of Dabrowski's conception of development is inner conflict achieved by a disconnection between "what is" and "what ought to be" in one's self (Dabrowski, in Piechowski, 1975). Dabrowski (1972) believed that many individuals who exhibit neurotic characteristics (i.e., intense inner conflict, feelings of inferiority regarding one's self, dissatisfaction with one's self, feelings of inadequacy, disquietude, anxiety) also possess the greatest potential for development. He further viewed "positive maladjustment" as a prerequisite to the development of authenticity and emphasized its positive effects (Dabrowski; Dabrowski, Kawczak, & Piechowski, 1970; Dabrowski & Piechowski, 1977). In his clinical work, Dabrowski observed that gifted and creative individuals are often in conflict with the demands and expectations of their environment, which are commonly incompatible with their higher value structure (Dabrowski; Dabrowski, Kawczak, & Piechowski).

The Concept of Developmental Potential

Dabrowski's levels do not represent stages of development; movement to a higher level is not automatic, and most individuals do not advance to the highest levels. In the concept of developmental potential, obtaining higher levels of development is contingent

upon one's original endowment of intelligence, special talents and abilities, will to develop, and five forms of experiencing called *overexcitabilities*. Many in the gifted community believe Dabrowski's overexcitabilities, as they contribute to developmental potential, are a measure and indicator of giftedness.

Piechowski (1999) characterized overexcitabilities as enhanced modes of being in the world. The word *over* used in connection with *excitability* connotes responses to stimuli that are beyond normal and often of a different quality. Dabrowski (1937, 1938) identified "psychic overexcitability" in five forms: psychomotor, sensual, intellectual, imaginational, and emotional. Piechowski and Cunningham (1985) explained the expressions of each overexcitability as:

> *Psychomotor overexcitability.* Is an organic excess of energy or heightened excitability of the neuromuscular system. It may manifest itself as a love of movement for its own sake, rapid speech, violent or impulsive activity, restlessness, pressure for action, and drivenness. It may be viewed as a capacity for being active and energetic. . . .
>
> *Sensual overexcitability.* Is expressed in the heightened experience of sensual pleasure, the seeking of sensual outlets for inner tension. Beyond desires for comfort, luxury, stereotyped or refined beauty, the pleasure in being admired and being in the limelight, sensual overexcitability may be expressed in the simple pleasure derived from touching things . . . or the pleasure of taste and smell. . . . In short, it is a capacity for sensual enjoyment. . . .
>
> *Intellectual overexcitability.* Is to be distinguished from intelligence. It manifests itself as persistence in asking probing questions, avidity for knowledge and analysis, preoccupation with theoretical problems. Other expressions are: a sharp sense of observation, independence of thought (often expressed in criticism), symbolic thinking, development of new concepts, striving for synthesis of knowledge, and searching for truth. . . .

> *Imaginational overexcitability.* Is recognized through rich association of images and impressions, inventiveness, vivid and often animated visualization, use of image and metaphor in verbal expression. . . . Intense living in the world of fantasy, predilection for fairy and magic tales, poetic creations and dramatizing to escape boredom are also observed. . . .
>
> *Emotional overexcitability.* Is recognized in the way emotional relationships are experienced, and in the great intensity of feeling and awareness of its whole range. Characteristic expressions are: inhibition (timidity and shyness) and excitation (enthusiasm), strong affective recall of past experiences or concern with death, fears, anxieties, or depressions. There may be intense loneliness, an intense desire to offer love, a concern for others. There is a high degree of differentiation of interpersonal feeling. (pp. 154–156)

Advanced development, characteristic of a deeper sensitivity and intensity of emotional experiencing, requires a profound knowledge of self and a more meaningful contact with the environment (Dabrowski, 1972). Overexcitabilities assist in meeting these essentials:

> One could say that one who manifests a given form of overexcitability, and especially one who manifests several forms of overexcitability, sees reality in a different, stronger, and more multisided manner. Reality for such an individual ceases to be indifferent but affects him deeply and leaves longlasting impressions. Enhanced excitability is thus a means for more frequent interactions and a wider range of experiencing. (Dabrowski, p. 7)

While the concept of developmental potential emphasizes the positive aspects of experiencing life with greater intensity and sensitivity, these same characteristics may also be experienced in negative ways. Individuals with elevated overexcitabilities are more susceptible to being misunderstood and alienated by those who don't share

or understand their unique personality traits (Lewis, Kitano, & Lynch, 1992; Lovecky, 1992; Piechowski, 1997; Silverman, 1993). Many individuals with elevated overexcitabilities attempt to hide or learn to control their intensities and sensitivities in order to conform to the expectations of others (Lewis, Kitano, & Lynch). Silverman acknowledges the position of such individuals, explaining that "Feeling everything more deeply than others do is both painful and frightening" (p. 17).

Research on the Theory

Researchers in the gifted education community have been interested in research and reflection about Dabrowski's theory for its appeal as a means of broadening the conception of giftedness by taking into account the personality attributes related to high ability (Piechowski, 1986). While adult biographical and case study analyses have provided evidence in support of Dabrowski's levels (Brennan, 1987; Brennan & Piechowski, 1991; Grant, 1990; Piechowski, 1975, 1978, 1990), studies with gifted students have focused strictly on the concept of developmental potential. This reflects what Piechowski (1986) described as a research direction aimed at measuring the presence and strength of the overexcitabilities as they contribute to the definition and identification of the gifted.

Measuring overexcitability is made possible through the use of the Overexcitability Questionnaire—Two (Falk, Lind, Miller, Piechowski, & Silverman, 1999), a 50-item, Likert-type scale instrument that is designed to measure the presence and degree of the five overexcitabilities. The studies discussed in this review used an earlier version of the questionnaire with 21-item free responses (Lysy & Piechowski, 1983). Piechowski and Colangelo (1984) compared gifted students with gifted adults and nongifted adults. Their results showed that elevated emotional, intellectual, and imaginational overexcitability scores clearly distinguished the gifted participants, both students and adults, from the nongifted. Gallagher (1986) found this overexcitability pattern could distinguish a group of gifted sixth-grade students from their nonidentified peers, and Schiever (1985) used the same profile to differentiate between high-

creative and low-creative seventh- and eighth-grade students. Breard (1994) found that gifted upper elementary students obtained higher overexcitability scores than nongifted students across all five forms of overexcitability. Ackerman (1997) found similar results with a comparison of gifted and nongifted high school students with psychomotor, intellectual, and emotional overexcitabilities acting as the major discriminates between the groups. In a study that compared the overexcitability profiles of intellectually gifted and creatively gifted middle school students, no significant differences were found (Ely, 1995).

Research using adult gifted and nongifted samples illustrates how the distinguishing characteristic of overexcitability may exist throughout the life span (Falk, Manzanero, & Miller, 1997; Miller, Silverman, & Falk, 1994; Piechowski & Cunningham, 1985; Piechowski, Silverman, & Falk, 1985; Silverman & Ellsworth, 1981). Overexcitabilities have also been exhibited in young (preschool) gifted children (Howard, 1994; Kitano, 1990; Silverman, 1983; Tucker & Hafenstein, 1997).

Discussion

The ideas that neurotic symptoms may be a sign of emotional development, that individuals can be "positively maladjusted," and that "overexcitability" can be considered a positive attribute make Dabrowski's theory more controversial in mainstream psychological theory and practice. However, parents of gifted children and gifted individuals themselves may find that Dabrowski's ideas provide a useful "framework for understanding and explaining the developmental patterns and challenges that occur for those of high ability" (Nelson, 1989, p. 11).

Those providing counseling services to the gifted should consider adding Dabrowski's concepts to their knowledge of developmental and psychological theory. As maladjustment and inner conflict may be necessary for some to gain a deeper and more emotional development, counselors and therapists can provide an empathic environment. This sentiment is echoed by Silverman (1993), who wrote, "One of the greatest gifts a counselor can give

gifted young people is an appreciation of their sensitivities, intensities, and passions" (p. 17).

For educators interested in alternate means of identifying students for gifted programs, Dabrowski's concept of developmental potential through enhanced overexcitabilities may provide a viable option. By moving beyond IQ measures and defining giftedness in terms of an elevated overexcitability profile, a wider range of students may be identified for gifted programs (Ackerman, 1997; Breard, 1994; Nelson 1989; Piechowski, 1979, 1986). Currently, overexcitability instruments are not conducive for schoolwide identification procedures; the Overexcitability Questionnaire—Two is designed solely for research with group data and not intended to provide individual diagnostic information (Falk, Lind, Miller, Piechowski, & Silverman, 1999), and the original Overexcitability Questionnaire is limited by its length of administration time, required level of writing skills and expressive language, and cost of scoring or training raters (Ackerman, 1997). Future research can help to develop an overexcitability instrument that can be used as part of an identification procedure in schools.

Since Dabrowski's (1964) first discussion of his theory, some research has been sporadically conducted in support of the theory's relevance to and implications for the gifted and talented. While this contemplation and discussion of the viability of Dabrowski's work continues, supporters of the theory should consider enhancing their argument by providing further empirical data that strengthen the link between the theory and the life experiences of gifted individuals.

References

Ackerman, C. M. (1997). Identifying gifted adolescents using personality characteristics: Dabrowski's overexcitabilities. *Roeper Review, 19,* 229–236.

Breard, N. S. (1994). *Exploring a different way to identify gifted African-American students.* Unpublished doctoral dissertation, University of Georgia, Athens.

Brennan, T. P. (1987). *Case studies of multilevel development.* Unpublished doctoral dissertation, Northwestern University, Evanston, IL.

Brennan, T. P., & Piechowski, M. M. (1991). A developmental framework for self-actualization: Evidence from case studies. *Journal of Humanistic Psychology, 31*(3), 43–64.

Dabrowski, K. (1937). Psychological basis of self-mutilation. *Genetic Psychology Monographs, 19,* 1–104.

Dabrowski, K. (1938). Typy wzmozonej pobudliwosci psychicznej. *Biul. Inst. Higieny Psychicznej, 1*(3, 4), 3–26.

Dabrowski, K. (1964). *Positive disintegration.* Boston: Little, Brown.

Dabrowski, K. (1972). *Psychoneurosis is not an illness.* London: Gryf.

Dabrowski, K., Kawczak, A., & Piechowski, M. M. (1970). *Mental growth through positive disintegration.* London: Gryf.

Dabrowski, K., & Piechowski, M. M. (1977). *Theory of levels of emotional development: Volume I—Multilevelness and positive disintegration.* Oceanside, NY: Dabor Science.

Ely, E. I. (1995). *The overexcitability questionnaire: An alternative method for identifying creative giftedness in seventh grade junior high school students.* Unpublished doctoral dissertation, Kent State University, Kent, OH.

Falk, R. F., Lind, S., Miller, N. B., Piechowski, M. M., & Silverman, L. K. (1999). *The overexcitability questionnaire —II: Manual, scoring system, and questionnaire.* Unpublished manuscript.

Falk, R. F., Manzanero, J. B., & Miller, N. B. (1997). Developmental potential in Venezuelan and American artists: A cross-cultural validity study. *Creativity Research Journal, 10,* 201–206.

Gallagher, S. A. (1986). A comparison of the concept of overexcitabilities with measures of creativity and school achievement in sixth-grade students. *Roeper Review, 8,* 115–119.

Grant, B. A. (1990). Moral development: Theories and lives. *Advanced Development, 2,* 85–91.

Grant, B. A., & Piechowski, M. M. (1999). Theories and the good: Toward child-centered gifted education. *Gifted Child Quarterly, 41,* 4–12.

Howard, D. D. (1994). *A naturalistic study of the psychosocial development of highly gifted girls.* Unpublished doctoral dissertation, University of Denver.

Kitano, M. K. (1990). Intellectual abilities and psychological intensities in young children: Implications for the gifted. *Roeper Review, 13,* 5–10.

Lewis, R. B., Kitano, M. K., & Lynch, E. W. (1992). Psychological intensities in gifted adults. *Roeper Review, 15,* 25–31.

Lovecky, D. V. (1992). Exploring social and emotional aspects of giftedness in children. *Roeper Review, 15,* 18–25.

Lysy, K. Z., & Piechowski, M. M. (1983). Personal growth: An empirical study using Jungian and Dabrowskian measures. *Genetic Psychology Monographs, 108,* 267–320.

Miller, N. B., Silverman, L. K., & Falk, R. F. (1994). Emotional development, intellectual ability, and gender. *Journal for the Education of the Gifted, 18,* 20–38.

Nelson, K. C. (1989). Dabrowski's theory of positive disintegration. *Advanced Development, 1,* 1–14.

Piechowski, M. M. (1975). A theoretical and empirical approach to the study of development. *Genetic Psychology Monographs, 92,* 231–297.

Piechowski, M. M. (1978). Self-actualization as a developmental structure: A profile of Antoine de Saint-Exupery. *Genetic Psychology Monographs, 97,* 181–242.

Piechowski, M. M. (1979). Developmental potential. In N. Colangelo & R. T. Zaffrann (Eds.), *New voices in counseling the gifted* (pp. 25–57). Dubuque, IA: Kendall/Hunt.

Piechowski, M. M. (1986). The concept of developmental potential. *Roeper Review, 8,* 190–197.

Piechowski, M. M. (1990). Inner growth and transformation in the life of Eleanor Roosevelt. *Advanced Development, 2,* 35–53.

Piechowski, M. M. (1997). Emotional giftedness: The measure of intrapersonal intelligence. In N. Colangelo & G. A. Davis (Eds.). *Handbook of gifted education* (2nd ed., pp. 366–381). Boston: Allyn and Bacon.

Piechowski, M. M. (1999). Overexcitabilities. In M. A. Runco, & S. R. Pritzker (Eds.), *Encyclopedia of creativity (Vol. 2,* pp. 325–334). San Diego: Academic Press.

Piechowski, M. M., & Colangelo, N. (1984). Developmental potential of the gifted. *Gifted Child Quarterly, 28,* 80–88.

Piechowski, M. M., & Cunningham, K. (1985). Patterns of overexcitability in a group of artists. *Journal of Creative Behavior, 19,* 153–174.

Piechowski, M. M., Silverman, L. K., & Falk, R. F. (1985). Comparison of intellectually and artistically gifted on five dimensions of mental functioning. *Perceptual and Motor Skill, 60,* 539–549.

Schiever, S. W. (1985). Creative personality characteristics and dimensions of mental functioning in gifted adolescents. *Roeper Review, 7,* 223–226.

Silverman, L. K. (1983). Personality development: The pursuit of excellence. *Journal for the Education of the Gifted, 6,* 5–19.

Silverman, L. K. (1993). The gifted individual. In L. K. Silverman (Ed.), *Counseling the gifted and talented* (pp. 3–28). Denver: Love.

Silverman, L. K., & Ellsworth, B. (1981). *The theory of positive disintegration and its implications for giftedness: Proceedings of the third international conference.* Miami, FL.: University of Miami School of Medicine.

Tucker, B., & Hafenstein, N. L. (1997). Psychological intensities in young gifted children. *Gifted Child Quarterly, 41,* 66–75.

7 INDIVIDUAL DIFFERENCES IN GIFTED STUDENTS' ATTRIBUTIONS FOR ACADEMIC PERFORMANCES

by **Nancy M. Robinson, Ph.D.**

Motivation and its origins constitute an area in which research is especially complex and contradictory, particularly with regard to gifted children (Dai, Moon, & Feldhusen, 1998). The translation of high intellectual ability to high achievement requires sustained investment in thinking and learning, as well as the production of actual contributions of worth. The foundation for high achievement lies in areas such as academic self-concept, self-confidence, achievement orientation, appropriate goal setting, and the healthy ability to weather setbacks.

Most (but not all) research comparing high-ability students to others has found gifted students to have more positive self-concepts, particularly with regard to academic abilities (Chamrad, Robinson, Treder, & Janos, 1995; Hoge & Renzulli, 1993; Kelly & Colangelo, 1984; but not Csikszentmihalyi, Rathunde, & Whalen, 1993); to be more accurate in predicting their performance (Pajares, 1996); to be

267 - 288

Webb, J., *uiding the gifted child: A practi-*
cal s Ohio Psychology Press.
Wendorf, y with the intellectually gifted.
The 51–38.
Whitmor *nderachievement*. Boston: Allyn
and
Wieczerk ıtal fears and expectations from
the point of view of a counseling center for the gifted. *European Journal for High Ability, 2,* 56–72.
Zaffrann, R. T., & Colangelo, N. (1979). Counseling with gifted and talented students. In N. Colangelo & R. T. Zaffrann (Eds.), *New voices in counseling the gifted* (pp. 142–153). Dubuque, IA: Kendall-Hunt.
Zilli, M. J. (1971). Reasons why the gifted adolescent underachieves and some of the implications of guidance and counseling to this problem. *Gifted Child Quarterly, 15,* 279–292.

SOCIAL AND EMOTIONAL ISSUES FACING GIFTED AND TALENTED STUDENTS:

What Have We Learned and What Should We Do Now?

by **Nancy M. Robinson, Ph.D.,**
Sally M. Reis, Ph.D.,
Maureen Neihart, Psy.D.,
and **Sidney M. Moon, Ph.D.**

The previous chapters yield a picture of the social and emotional lives of gifted children and youth that is like a cup both half full and half empty. Although these young people encounter a number of challenges—most, but not all, of them because they live in environments that serve them poorly—the research summarized in this volume points to clear steps to improve matters. Consequently, we conclude with a set of recommendations, the minimum we must do and the best we can do to promote the healthy develop-

ment of children and youth with high potential, and offer recommendations for research and advocacy.

Central Conclusions

Admittedly working from a limited research base, the authors of the previous chapters have reached consistent conclusions. These are the major themes derived from the overall thrust of the reviews:

- There is good news. There is no evidence that gifted children or youth—as a group—are inherently any more vulnerable or flawed in adjustment than any other group. We failed to discover evidence of social or emotional vulnerabilities or flaws unique to intellectually gifted learners or those with high creative potential. With the exception of mood disorders in creative writers and artists, indices of serious maladjustment, such as suicide, delinquency, and severe behavior disorders, appear no more (or less) frequently in this group than the general population. Indeed, many gifted young people possess assets that, when supported, may enhance their resilience to highly negative life events and enable them to utilize their talents to achieve productive and satisfying lives.
- When social and emotional problems related to an individual's giftedness do occur in this population, they most frequently reflect the interaction of an ill-fitting environment with an individual's personal characteristics. Gifted students by definition are those whose intellectual advancement is such that they require special educational experiences that are seldom forthcoming in regular classrooms (U.S. Department of Education, 1993). Most of their school days are spent relearning material they have already mastered or could master in a fraction of the time that it takes their chronological peers. Therefore, many never learn strategies to cope with the challenges related to effort and perseverance that other children encounter throughout their childhood and later lives. In addition, the maturity of their personal outlook, which is, in many ways, similar to that of older students, may result in a mismatch, not only with the curriculum, but usually also with their classmates. They may encounter a variety of intellectual and social issues in addition to the developmental tasks usually encountered by persons of their age. They may have difficulty finding friends who share their understandings, and far too often they endure not only the burden of loneliness, but also enormous peer pressure to "be like everyone else."
- From this perspective, the news is also good, as much can be accomplished by modifying the contexts in which gifted and talented children grow up. With greater understanding, teachers, parents, counselors, and peers can make many of the changes that will offer the challenges, flexibility, and acceptance that gifted students need to flourish. It is up to caring adults to redesign life experiences so that these young people do not have to resolve challenging issues on their own.
- Far from finding that "gifted children are all alike," the reviewers found marked differences among this highly diverse group. Because no single panacea exists, researchers, educators, parents, and other citizens must join together to implement a range of strategies matched to the needs of individual gifted and talented children and youth. Among the dimensions to consider are:

    - *Degree of advancement.* In IQ terms alone, wide differences exist, even between moderately gifted students and the most gifted, and special programs must take these individual differences into account.
    - *Gender.* Reviewers have found somewhat different issues confronting gifted girls (whose needs have received attention in recent years) and gifted boys (who are seldom studied.)
    - *Age.* Very young gifted children may thrive within their families, but may lose their enthusiasm for learning and even become underachievers when they enter school. Peer pressures and stresses mount for gifted adolescents.
    - *Ethnicity, language, and income.* Gifted students who come from families that differ because of race, ethnicity,

language, socioeconomic status, or a combination of these factors face their own special challenges. Not only may their talents escape recognition, but family and peers may actively discourage or passively fail to support their optimal talent development. Furthermore, they may retreat from some opportunities because they find too few of their own group present.

- *Sexual orientation.* Gays, lesbians, and bisexual gifted persons may face additional burdens of difference that can cause additional pressures and anxiety.
- *Internal discrepancies in ability levels.* It is the rule, rather than the exception, to find gifted students with uneven abilities—higher in verbal than math, or higher in visual-spatial than verbal reasoning, for example, or vice versa. Such discrepancies present their own challenges.
- *Disabilities.* Gifted children are not immune to disabilities in reading, writing, and mathematics; to sensory or motor impairment; to attention deficit disorder; or to serious psychiatric disorders. In this day of increasing specialization, it is often difficult to locate professionals in the field who can address both concerns.

- Contradictions abound about this area. There are, contrary to our major findings, respected authorities in this field who maintain that gifted children are emotionally different from others. Roeper (1996), for example, has asserted that "the self of the gifted child is structured differently" (p. 18). She contended that gifted individuals have a more complex view of the world, that their depth of awareness is different, and that gifted children have an emotional need to develop themselves and to master the world. Dabrowski also maintained that people with the highest potential follow a developmental path that is uniquely different. He believed that they are characterized by an overexcitability and intensity of character and a dissatisfaction with what is (see O'Connor, this volume).

While such differences may indeed exist, we caution readers to evaluate carefully whether most or all such characteristics are inherently or qualitatively *different,* or whether they reflect primarily the *maturity of viewpoint* that is a part of intellectual and emotional giftedness (Feldhusen, 1989; Jackson & Butterfield, 1986). What appears qualitatively different may be common to other young people of chronological ages equivalent to the mental ages of the individuals being described. We should not expect gifted and talented children to see the world in the same way as do other children of their age. Furthermore, some characteristics (e.g., perfectionism and entelechy) may take on their own flavor because students become accustomed to high levels of achievement, and still other characteristics (e.g., uneven abilities) from the fact that their highest abilities are "so high." Some (e.g., sensitivities and excitabilities), however, may indeed be qualitatively special traits of gifted students. We need considerable research, first to determine whether in fact these characteristics are more common to gifted than nongifted youngsters, and second, to explore to what extent qualitative differences exist and whether or not the dyssynchrony of an "older" mind in a younger body exists.

Nevertheless, it is worthwhile to examine some common characteristics of gifted individuals that may pose challenges to their social and emotional balance and adjustment (see Table 1). Note that many of these characteristics can be assets when the environments in which they live are accepting and appropriately supportive.

Although possible negative consequences resulting from these traits are cited in some research discussed in this book, many of them can also have a positive impact on the individual's social and emotional well-being. For example, Schuler (this volume) found many examples of gifted students who display healthy perfectionism, defined as doing their personal best and consistently wanting to do well. Reis, Neu, and McGuire (1995) found that, although half their sample of high-ability college students with learning disabilities had sought counseling to address social and emotional difficulties, the majority evolved into strong, competent young adults with high levels of resilience and academic success. The same investigators cautioned, however, that their sample includes only those who had survived the secondary school system and who had had very supportive parents.

Few will disagree that having gifts and talents causes some gifted children and youth to struggle with their identity and with

Table 1

Social and Emotional Characteristics of Gifted Children That May Pose Challenges

- perceptiveness (O'Connor, Neihart & Olenchak)
- high involvement and preoccupation; need to understand (Gross)
- heightened sensitivity (O'Connor, Hébert)
- perfectionism and need for precision (Schuler, Reis, Greene)
- uneven intellectual abilities, even above-average abilities experienced as deficits (Silverman)
- asynchronous development of physical, intellectual, social, emotional aspects (Silverman)
- emotional intensity (O'Connor, Keiley, Hébert)
- feelings and early awareness of being different (Rimm, Reis, Ford)
- anxiety caused by advanced knowledge (Reis & McCoach)
- need for mental stimulation (O'Connor, Neihart & Olenchak, Reis & McCoach, Rogers)
- entelechy—a desire to become all one is capable of becoming (Gross)
- nonconformity and questioning of authority (Neihart & Olenchak)
- excitability and overexcitability (O'Connor)
- tendency toward introversion and internalized locus of control (Silverman, Keiley, Gross)
- multipotentiality—the ability to succeed in any of several domains, requiring difficult choices (Greene, Reis & McCoach)
- tendency toward self-doubt (females) (Reis, Reis & McCoach)

Note. Citations are to relevant chapters in this volume.

balancing their own abilities and needs with their academic life, their family life, and their career choices (Moon & Hall, 1998; Olenchak, 1999; Reis, 1998). Social and emotional stress can result when gifted and talented students are teased by peers and subjected

to pressure to conform to peer norms. Many talented students learn early on to stop raising their hands in class and to underplay their abilities to avoid labels such as "nerd," "dweeb," or "dork." Consider the experience of an exceptional student who pleaded with her school board to save the program in which she had opportunities to take academically challenging classes with other talented students in both middle and high school:

> In my 12 years in school, I have been placed in many "average" classes—especially up until the junior high school level—in which I have been spit on, ostracized, and verbally abused for doing my homework on a regular basis, for raising my hand in class, and particularly for receiving outstanding grades. (Peters, 1990, p. 10)

The research cited in this book clearly indicates that some students survive these experiences by developing resilience; others begin a spiral of underachievement from which they do not recover; and still others experience continuing negative social and emotional pressures despite academic successes that may or may not last. These outcomes, as we have pointed out, are not the result of inherent vulnerabilities, but often result from a lack of fit with a frequently nonchallenging environment.

What We Can Learn From Talented Adolescents Who Succeed

Some high-potential teenagers manage to maintain their positive trajectories in developing their talents, and some do not. What can we learn from those who do? In a landmark longitudinal study of 200 talented teenagers, Csikszentmihalyi, Rathunde, and Whalen (1993) found a strong core of personal attributes that distinguished those who did and those who did not maintain their talents from their freshman to their senior year in high school. Among these attributes were intellectual curiosity, active seeking of information, strong desire to achieve, perseverance in attaining goals, preference for leading and controlling, desire to display accomplishments and gain others' attention, and lit-

tle questioning of their own worth. The productive male teens valued stability and predictability more than did the other group, preferred to avoid physical risks, enjoyed arguments, and had an unusual need for social recognition. The productive female teens were less inclined to identify with "feminine" values (orderliness, neatness, and predictability) than those who abandoned their talents. The successful teens in this study "entered adolescence with personality attributes well suited to the difficult struggle of establishing their mastery over a domain, a desire to achieve, persistence, and a curiosity and openness to experience" (Csikszentmihalyi, Rathunde, & Whalen, p. 82).

Another important finding of this study was the influential role played by families. The successful teenagers were more likely to come from families termed "complex" by the authors. These families were warmly engaged with one another and, at the same time, maintained high expectations for their children. The literature on achievement motivation (McClelland, Atkinson, Clark, & Lowell, 1953; Parsons, Adler, & Kaczala, 1982) has long recognized the importance of supportive families that reward responsibility and expect children to do their best from an early age.

The concepts underlying *resilience theory* (see Neihart, this volume) provides a way to understand why some gifted and talented students who encounter difficult situations manage to remain achievers, while others do not. Studies of risk and resilience point to the powerful effects of certain personal characteristics—above-average intelligence being one of the most powerful—and the availability of social supports (caregivers, mentors, teachers, peers) in mitigating the negative effects of adversity. Preliminary findings from a handful of studies that have specifically examined resilience in gifted youth are consistent with earlier studies of mixed groups, and they demonstrate the advantages of using this research-based framework to address the social and emotional needs of gifted children. Operating within this framework, practitioners and researchers alike might ask about the children with whom they work, "What are the risks (stressors) and the protective mechanisms (social supports, developmental assets, and personal qualities) that contribute to positive and negative outcomes?" All of the means that have been suggested in this volume to support gifted children's positive adjustment can be viewed as either diminishing

risk factors (e.g., reducing understimulating environments, disabling perfectionism, social isolation) or promoting protective factors (e.g., enhancing supportive relationships with caring adults, talent development, and problem-solving skills, and personal characteristics known to be associated with psychosocial strength and achievement, such as a positive explanatory style, self-efficacy, and androgyny).

What We Should Do to Address Social and Emotional Issues Faced by Talented Children and Youth

It is time that educators, researchers, and parents put to rest some of the widespread, false myths about high potential youth (e.g., "They are too smart for their own good," "They don't get along with other children") and reach some consensus about those things that can be done to alleviate the situation. Many current explicit and implicit school policies interfere with the full actualization of high ability. Moreover, "Risk is pervasive. If a student is at risk in one area, that student is very likely to be at risk in many other areas" (Frymier et al., 1992, p. 5). Research has clearly delineated the multiple sources of the challenges faced by gifted students, but is yet to develop effective long-range interventions.

Keeping in mind the resilience model described above, it is clear that we can bring about major improvement in the outcomes of the interactions between gifted students and their environment. There are a number of strategies that may work—and others to be developed—that can minimize risks and maximize assets as gifted students interact with all their environments: family, school, peers, and the larger community.

Preventive Efforts

As we all know, "an ounce of prevention is worth a pound of cure." We already have available a variety of optimizing strategies that can improve the fit of the environment with the student, enhance the knowledge and skills of the adults with whom students

interact, and encourage the proximal (peer) and distal (community) environments to be more accepting of the gifted students within their midst.

It is important to note that practically none of the section that follows is based on "hard" research data, with the major exception of findings about the effects of various forms of educational adaptations for gifted students. The recommendations for teacher and parent training; for anticipatory and responsive group counseling for students, parents, or both; and for interventions for underachievement and other forms of maladjustment are based on the sparsest of research data. Nevertheless, as we move from our extensive review of the findings about the social and emotional lives of gifted children to making recommendations for action, we feel compelled to offer the following as an agenda of worthy possibilities.

Educational modifications, including teacher training, are probably the single most effective way to prevent social and emotional difficulties in gifted students. They need appropriate levels of academic challenge and time every day to learn with others of similar abilities, interests, and drive. There are no substitutes for this remedy. Although counseling, extracurricular enrichment, mentorships, and so forth are helpful, they should never be considered an adequate alternative to a responsive and flexible educational environment matched to the level and pace of the student's learning, recognition for excellence of work habits and persistence of effort, and some choice of topic in accord with individual interests. These are the rights of every student. Some appropriate opportunities can be provided by well-trained teachers in the regular classroom, and some can be achieved by placing students for all or part of the day in regular classes above their ordinary grade level. Often, special programs, ranging from full-time to part-time, as well as after-school classes, best address these basic needs of gifted students.

Distinctions must be made between efforts that bring about fundamental changes in students' everyday school experience (e.g., compacting and differentiated instructional methods, cluster grouping, self-contained classes, above-grade classes) and those that are add-ons or complementary (e.g., pull-out programs, contests, after-school clubs). While the latter are often of significant value, gifted students need a challenging school day every day. Much of the distress experienced by gifted students who are in ill-fitting school environments could be a thing of the past if we made substantive changes in the schools.

These changes will not occur until we train teachers— both those who do and those who do not specialize in working with gifted children—to recognize and respond to advanced abilities. Furthermore, many students not identified as gifted have advanced abilities in specific domains. Techniques for differentiating teaching and expectations for student performance will empower teachers to forsake a "one-size-fits-all" approach, to the benefit of all students. There is no denying, however, that such approaches require more planning time and energy, as well as imagination, tolerance for a bit of disorder, and a desire to change.

School administrators must lead this effort. They need to value flexibility, cooperation among teachers, and accelerative methods, since these require administrative changes. Unless there is accountability for the continued progress of our most able students and recognition of advanced levels of performance, many teachers will continue to pursue the status quo, and gifted students will be essentially left out of current school reform efforts. At a state level, services are enhanced when a mandate, a legal requirement, exists to meet the needs of identified gifted children and when special certification of teachers of the gifted is required for those who are special teachers or teaching consultants. Even with a mandate, however, economically poor states are likely to eliminate programs for high-ability students (Purcell, 1994).

Enhancement of parents' understanding and responsiveness to their students' needs. Parents of gifted children often feel at a loss to know how to best support their development. They want help in understanding the children's needs; in treading the fine line between appropriate expectations and "pushing"; in learning skills of negotiating with teachers and other school personnel; and in widening and deepening their children's learning through family activities, outside tutors, or coaches. The needs are particularly acute for families who do not come from a background of education, for those whose own experiences in school were unfulfilling, and for those who are otherwise at a disadvantage for knowing how to help their

children to be successful in school. In addition to how-to books, parent groups can reach out to these families to offer empowering opportunities. Special efforts are often needed to make such parents feel comfortable even admitting that their child's abilities are advanced and then coming together for discussion. We as professionals have done relatively little in this area, although some parents—typically well-educated and financially comfortable parents—have reached out to each other.

To the extent that young people recognize their actual and potential assets, they can meet the world with optimism and insightfulness, recognize that mismatches are not their fault, and accept their differences from others, rather than try to eradicate them. It is primarily with acceptance, respect, and feedback from caring adults (parents, teachers, counselors) and peers that gifted children will develop this equanimity and the ultimate resilience that accompanies it.

Changes in the peer culture. A number of authors in this volume have alluded to the negative effects of anti-intellectualism in the peer group, the deriding of gifted classmates as "nerds," or worse. Teasing of bright students is a form of misbehavior as offensive as hurling epithets at a student of color, a student with a disability, or a member of any other marginalized group (and doubly so when the bright classmate is also such a student).

Bringing about changes in the peer culture is never easy, and it will not occur at all unless respected adults—especially parents and teachers—respond positively to gifted children. Students who do their outstanding academic and artistic work deserve the same kinds of admiration that athletes receive. Prizes for academic accomplishment are but a small part of this effort and may indeed backfire unless the milieu is positive. In those schools that have adopted an integrated curricular preventive approach to social and emotional issues led by teachers or counselors, surely these issues should be a topic of discussion. The best we can expect is probably incremental change, not a revolution, but adults need to remain alert to manifestations of an anti-intellectual peer culture, to deal with the situation as directly as possible, and to support the gifted child who is the target.

In addition, gifted students need to be made explicitly aware that all of us belong simultaneously to several subcultures, which may be defined by school class, neighborhood, ethnicity, language, or religion. Finding acceptance among intellectual peers at school does not imply that one has rejected one's other subcultures, even when those subcultures fail to appreciate high academic motivation and attainment.

Efforts to make the broader society accepting of giftedness, especially in those students from nonmainstream families. We are living in a society that is intensely ambivalent toward its intellectual leaders. Support for research—especially medical research—is generous, and recipients of the Nobel Prize are honored. But, true fortunes and daily headlines are made by athletes and entertainers who may never have even attended college. Rock stars earn far more than leading orchestra conductors. Yet, many beginning teachers are paid so poorly that they cannot afford to house, feed, or educate their families. It will take patience, creativity, and perseverance to reverse this situation. In the meantime, we can show by our own example and advocacy that anti-intellectualism is unacceptable, that it is, in fact, a form of bigotry as pernicious as any other.

At the same time, we can actively welcome talented students to that part of the society that values intellect and creativity, learning and the arts. The adult world enriched by public lectures, book clubs, concerts, drama, painting, sculpture, and dance needs to reach out not only to students with specific talents, but to talented students who may find the kind of acceptance at these events that may be lacking in their home schools.

Supportive Efforts: Minimizing Stress When It Occurs

Despite preventive efforts, stresses occur in the lives of gifted young people, just as they do in everyone's lives. Supportive services can minimize the effects of such stressors and, indeed, sometimes turn them into assets.

Models for Counseling and Meeting the Affective Needs of Gifted and Talented Students

Both strategies and preliminary models have been suggested for addressing the emotional needs of students with gifts and talents, although few have been used comprehensively by school personnel or even by private counselors who practice with this population. (Reis, this volume). All involve some type of combination of individual and group counseling in home, school, and, if necessary, with professionals working in the health care field. Many excellent suggestions have been made in strategies and models of positive adjustment, counseling, and social and emotional support; however, few are comprehensively implemented, and little empirical evidence exists indicating that any of these strategies actually makes a difference in the lives of gifted and talented children and youth.

Transitions and shifts in comparison groups. As discussed by Moon (this volume), many gifted students experience stress when they enter a special class for gifted students, enroll in a more advanced class, enter a summer program, or skip a grade. The transitional shift from being top of one's class to simply one of the group—or even one who might be struggling to keep up—can be difficult. Even very bright students often fail to understand that their comparison group has changed. Some students do not, however, survive the transition and opt out of the very situation that would provide both the academic challenge and the peer group they desire. Anticipatory counseling can ease these types of matters considerably.

Group counseling. Similarly, group counseling can be helpful in dealing with many ordinary stressors, such as planning the trajectory of secondary school, choices among colleges, and career choices. Some choices made during secondary school (e.g., whether to take calculus) have long-range ramifications for careers. Stress-management and time-management skills (when schoolwork has been undemanding), inevitable peer issues, and special issues for specific groups (e.g., girls and boys, members of underserved minorities) are all topics that can be handled well in groups.

Family guidance groups. As mentioned in the previous section, appropriate readings and parent and family support groups that deal with the same topics as those for their children can reduce parental isolation and increase competence at handling potentially stressful situations. These discussion groups may be especially helpful to economically disadvantaged families who have less experience than others with such matters.

Interventions When Things Have Gone Wrong

Underachievement. It is beyond the scope of this volume to discuss the array of specific interventions for the ills that may befall gifted and talented youth. We will use one area, underachievement, to comment on what should be minimally acceptable standards of support. Student performance that falls noticeably short of potential, especially for young people with high ability, is bewildering and perhaps the most frustrating of all challenges faced by teachers, students, and parents. Despite six decades of research on this topic, the problem of underachievement is still identified as the number one concern among educators of high-ability students (Renzulli, Reid, & Gubbins, 1991).

The causes of underachievement are diverse and emanate from dysfunctional family relationships, motivational difficulties, poor social skills, peer rejection, learning and attentional disabilities that go too long unrecognized, and so on. For most students of high potential, significantly adding to the situation, if not the primary cause, are the daily encounters with material and skills long since mastered, slow pace of progress, low levels of discourse, and content that fails to match interests.

A few strategies have been shown by research to mitigate underachievement. These include curriculum compacting to eliminate reteaching what a student already knows (Reis, Burns, & Renzulli, 1992), self-selected independent or small-group studies (Baum, Renzulli, & Hébert, 1995), and the shift to more challenging and engaging learning environments that provide opportunities for accelerated progress. Because of the diverse sources of underachievement, approaches will need to be individualized and multifaceted (Siegle & McCoach, this volume). For many students,

counseling should be provided to handle family and personal issues and to enable students to strengthen those personal traits that can serve as assets.

Counseling and family therapy. We have mentioned counseling strategies as both preventive and stress-reducing, but the more traditional role of counselors and therapists in treating emotional and behavioral problems when they occur should also be mentioned. Unfortunately, as Moon (this volume) has mentioned, few counselors have been trained to understand the special issues confronting gifted students, and, as a result, they often fail to distinguish between healthy and unhealthy differences. Furthermore, they are all too often ready to blame giftedness as the source of the difficulty because they have, like others, been exposed to the myths regarding the supposedly high rates of serious pathology in this group.

What Must We Do?

Because there are social and emotional factors associated with high performance, we must address the needs of the whole child. At the very least, three things ought to be done, and three things might characterize our very best efforts:

The Minimum We Must Do

- Provide appropriate educational choices. No single strategy or setting will fit the needs of every gifted child, but the ordinary classroom, maintaining the usual *status quo,* will fit the needs of none.
- Provide training for teachers, parents, counselors, and others in identifying high ability and understanding its concomitants. Enable them to see that many problems, when they occur, result from the mismatch of the student with an unsuitable environment.
- Recognize the great diversity among those labeled "gifted and talented" and respond to the individual student, not the stereotype. It is particularly important to recognize individual differences among traditionally underserved populations and to develop sensitivity to the kinds of support they can use.

The Best We Can Do

- Focus on helping gifted individuals develop resilience. Help them to evaluate their assets and the risk factors with which they deal so they can maximize the former—including developing their own strengths and seeking mentors and advocates when they are lacking—and develop strategies to deal constructively with the latter.
- Develop a continuum of services, including educational, counseling, family, and community programs, from early childhood through college, to enable approaches that meet the needs of specific individuals.
- Continue to advocate for changes in the culture, promoting acceptance and respect for gifted students and the willingness to make the relatively small investments they need for what is potentially an enormous payoff.

Priorities for Research on the Social and Emotional Needs of High Potential

Throughout this volume, reviewers have decried the lack of systematic research in this field. Designated research funds have been few and far between, and what funding exists (i.e., federal funds under the Jacob Javits Act) has been largely devoted to a single theme, that of developing services for underserved minorities. As a consequence, most studies have enrolled small samples that are easy to identify, and most of our knowledge comes from studies of gifted students who have done well enough to be selected for special programs (and, to an unknown degree, who come from families astute enough to make application for such programs). Research of many kinds is sorely needed. As this report shows, sufficient knowledge is currently available to guide the next generation of research efforts.

Investigators in the "giftedness community" are too often isolated from mainstream research in developmental psychology and

education, with the result that they are too often seen as parochial and that they fail to profit from the insights developing in those fields. It is important that we not maintain this isolation, but increase the cross-fertilization of interdisciplinary work.

Investigators interested in gifted students should join forces with the currently developing field of "positive psychology" (Seligman & Csikszentmihalyi, 2000; Sheldon & King, 2001) to maximize understanding and encourage the enhancement of human assets, such as those that gifted children possess, to promote the progression of intelligence into wisdom, energy into commitment, and promise into fulfillment.

Any research undertaken should carefully describe the groups of children who are participants. It is not only impossible, but inaccurate to describe gifted children as though they were all the same. As mentioned previously, dimensions of difference include domains and levels of ability, gender, age, ethnicity, and family background; internal discrepancies in development; motivation; and a wide variety of other personal characteristics. Priority should be given to understanding the ways in which demographic and personal variables interact with children's abilities and environments to determine the patterns of their lives.

Many more studies should include a minimum of three groups: a target gifted group, a comparison group of average ability matched to them by chronological age, and an older comparison group of average ability matched by mental age. The addition of a fourth group of gifted students matched with the last group on chronological age would also help to tease out the generalizability of the characteristics being studied. This "MA-CA" research design is familiar to investigators of persons with mental retardation and would help us to distinguish between possible qualitative characteristics and those that are maturity-based.

At the same time, because it has been noted that some personal characteristics (e.g., introversion, perfectionism, and intensities) and some adjustment difficulties (e.g., attention-deficit disorder, eating disorders, and depression) are, or *may be*, more frequent among gifted students, carefully controlled studies that compare well-described groups of gifted children with other children are needed.

Prospective longitudinal studies are needed to identify the antecedents and predictors of positive and negative developmental outcomes for subgroups of gifted children who are growing up under different conditions. Of primary importance are studies comparing the effectiveness of various styles of parenting and various educational programs in promoting the attainment and mental health of gifted participants.

Studies are needed to compare the effectiveness of a variety of supports and interventions for gifted children and their families. Which educational and other strategies promote positive outcomes most effectively? Which new approaches hold promise? More research is needed into the specific kinds of supports that can be of help to specific groups of gifted students who are experiencing difficulties. By evaluating the effectiveness of a variety of approaches to address concerns in well-defined groups of children, the success and efficiency of such efforts should be greatly enhanced.

As noted, most of the existing research has been conducted with academically or intellectually gifted youth who are participating in special programs. We know much less about other types of giftedness in children—for example, those who are artistically or creatively gifted.

We also know little about academically gifted children whose needs are not met in the schools, for example, those for whom there are no existing programs, those who are overlooked for reasons of ethnicity or insufficient mastery of English, those with uneven patterns of abilities, and those whose academic achievement fails to reflect their advanced development. Research is needed to discover reliable ways to identify gifted children who are not effectively served at present.

High priority should also be given to efforts to understand the subtle dynamics of underachievement and loss of potential.

Recent knowledge about the history and nature of mood disorders and suicide among highly creative adults suggests that we should be looking more closely at teenagers who are talented in the visual arts and writing in order to institute preventive efforts to support young people at risk for such conditions.

Detailed examination is needed of the specific kinds of learning disabilities shown by gifted students in comparison with other

learning-disabled students. Intervention efforts will be greatly enhanced by such focused understandings.

Finally, an effective research agenda needs appropriate levels of funding. Good research is almost always expensive. As we have noted, most existing research about social and emotional issues facing high-potential individuals has been carried out with small groups in the absence of carefully selected comparison groups, and it often lacks methodological precision simply because of cost. At present, research funds specifically available for investigations with this population are extraordinarily limited. The incentives and possibilities for carrying out carefully designed, coherent, and ultimately useful research are often fiscal. With funding, this area could be transformed.

A Final Word

The notion that some people can be "too smart for their own good" permeates contemporary society and creates a social climate in which intellectual and creative efforts by children and adults are undervalued. One consequence of anti-intellectualism has been a damaging tendency on the part of gifted children to deny their talents and to try desperately to become "just like everyone else." In a society in which all citizens should be respected and welcomed for who they are and what they can contribute to others, respect for individuality and appropriate resources must be provided to gifted and talented youth, as well as others. Positive changes will ensue if we create an open climate for the development and support of gifts and talents:

- Understanding will be enhanced that giftedness does not inherently bring with it increased social and emotional vulnerability. Problems do not occur simply because a child demonstrates gifts and talents, and they must be understood in a broader context.
- National efforts to increase the availability of a variety of appropriate instructional and out-of-school provisions must be a high priority since research indicates that many of the emotional or social difficulties gifted students experience disappear when their educational climates are adapted to their level and pace of learning. Among such educational provisions should be opportunities for academic acceleration and enrichment, together with opportunities for gifted children to find companions of similar maturity, interests, and commitments to develop their gifts and talents. Too many schools across the country actively discourage, or even prohibit, capable students from moving through the curriculum at a pace commensurate with their abilities. Sadly, too, many schools maintain practices that prevent gifted students from working with others of similar ability for all but a couple of hours a week.
- Wider acceptance of the value of high attainment will create an atmosphere that rewards students' best efforts and their courage in the face of life's challenges. These two components are essential to the fulfillment of promise.
- Opportunities should be provided for adults—particularly parents, teachers, counselors, and potential mentors—to enhance their skills at recognizing talent and responding effectively to the social and emotional needs of gifted and talented students in a wide variety of ways. This will lead to the creation of an informed cohort of adults who can support and counsel gifted students as needed and can nip in the bud many potential problems before they fester.

Our society needs to recognize with empathy creative persons who may experience pain and even serious mental health disorders. Continuing support and intervention should be provided to such young people and adults to enable them to weather the difficult times while maintaining their creative trajectories.

References

Baum, S., Renzulli, J. S., & Hébert, T. P. (1995). *The prism metaphor: A new paradigm for reversing underachievement.* (Collaborative Research Study 95310). Storrs: The National Research Center on the Gifted and Talented, The University of Connecticut.

Csikszentmihalyi, M., Rathunde, K., & Whalen, S. (1993). *Talented teenagers: The roots of success and failure.* New York: Cambridge University Press.

Feldhusen, J. F. (1989). Why the public schools will continue to neglect the gifted. *Gifted Child Today, 12*(2), 56–59.

Frymier, J., Barber, L., Carriedo, R., Denton, W., Gansneder, B., Johnson-Lewis, S., & Robertson, N. (1992). *Growing up is risky business, and schools are not to blame* (Final report of the Phi Delta Kappa Study of Students At Risk, Vol. 1). Bloomington, IN: Phi Delta Kappa.

Jackson, N. E., & Butterfield, E. C. (1986). A conception of giftedness designed to promote research. In R. J. Sternberg & J. E. Davidson (Eds.), *Conceptions of giftedness* (pp. 151–181). Cambridge, England: Cambridge University Press.

McClelland, D., Atkinson, J., Clark, R., & Lowell, E. (1953). *The achievement motive*. New York: Appleton-Century-Crofts.

Moon, S. M., & Hall, A. S. (1998). Family therapy with intellectually and creatively gifted children. *Journal of Marital and Family Therapy, 24*, 59–80.

Olenchak, F. R. (1999). Affective development of gifted students with nontraditional talents. *Roeper Review, 21*, 293–297.

Parsons, J. E., Adler, T. F., & Kaczala, C. M. (1982). Socialization of achievement attitudes and beliefs: Parental influences. *Child Development, 53*, 310–321.

Peters, P. (1990, July). TAG student defends programs against critic. [Letter to the editor]. *The Register Citizen*, p. 10.

Purcell, J. (1994). *The status of programs for high ability students.* (CRS 94305). Storrs: The National Research Center on the Gifted and Talented, The University of Connecticut.

Reis, S. M. (1998). *Work left undone: Compromises and challenges of talented females.* Mansfield Center, CT: Creative Learning Press.

Reis, S. M., Burns, D. E., & Renzulli, J. S. (1992). *Curriculum compacting: The complete guide to modifying the regular curriculum for high ability students.* Mansfield Center, CT: Creative Learning Press.

Reis, S. M., Neu, T. W., & McGuire, J. M. (1995). *Talent in two places: Case studies of high ability students with learning disabilities who have achieved.* Storrs: The National Research Center on the Gifted and Talented, The University of Connecticut.

Renzulli, J. S., Reid, B. D., & Gubbins, E. J. (1991). *Setting an agenda: Research priorities for the gifted and talented through the year 2000.* Storrs: The National Research Center on the Gifted and Talented, The University of Connecticut.

Roeper, A. (1996). A personal statement of philosophy of George and Annemarie Roeper. *Roeper Review, 19*, 18–19.

Seligman, M. E., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist, 55*, 5–14.

Sheldon, K. M., & King, L. (2001). Why positive psychology is necessary. *American Psychologist, 56*, 216–217.

U.S. Department of Education, Office of Educational Research and Improvement. (1993). *National excellence: A case for developing America's talent.* Washington, DC: U.S. Government Printing Office.

CONTRIBUTORS

Sanford J. Cohn, Ph.D., is a professor in the College of Education at Arizona State University whose research focus is on self-actualization and the development of talent. He has created several graduate programs with specialization in the education of gifted learners. He is also a licensed psychologist, serving highly gifted youths and their families. Dr. Cohn founded the Center for Academic Precocity at ASU in 1979. Since 1991, he has served as the principal investigator for Conexiones, a program that introduces educationally motivated migrant education students to state-of-the-art technology (robotics and video-ethnography) and to the opportunities available on the campus of a major state university.

Donna Y. Ford, Ph.D., is a professor of special education at the Ohio State University, where she teaches courses in gifted education. Dr. Ford's research focuses on recruiting and retaining culturally diverse students in gifted education, reversing underachievement among gifted Black students, and creating multicultural curricula that challenge gifted students. She has published widely in the fields of urban and gifted education, is the author of two books, and consults with school districts nationally.