Dabrowski on Intelligence: Dethroning a Venerable Construct

Sal Mendaglio
University of Calgary, Calgary, Alberta, Canada

Abstract

In recent years, there have been attempts to diminish the privileged position held by the construct of intelligence. Made pre-eminent by such luminaries as Binet, Terman, and Spearman, recently traditional intelligence has been demoted to simply another variable. With the rise of multiple intelligence and emotional intelligence, traditional Intelligence Quotient (IQ) is challenged by Emotional Quotient (EQ). In gifted education, current theories of giftedness, while retaining intelligence as a criterion, add other criteria, such as productivity, as necessary to define giftedness — a dramatic shift from Terman's sole criterion of high IQ score. In contrast, Dabrowski's theory of positive disintegration dethrones the construct and relegates intelligence to a subservient role. This article discusses Dabrowski's perspective on intelligence and responds to the question: To what is intelligence subservient?

***Keywords*:** Positive disintegration; Dabrowski; intelligence; giftedness.

Intelligence has occupied a privileged place in psychology and education, including gifted education. There have been attempts to dislodge intelligence from its lofty position of reigning supreme over other psychological and educational constructs. While some authors have been successful in diminishing the importance of intelligence, Dabrowski (1967, 1970, 1972, 1996) in his Theory of Positive Disintegration (TPD) has dethroned it. In this article, I support this assertion by presenting the role of intelligence in TPD.

From IQ to EQ

Interest in the construct of intelligence, its nature and measurement, is as old as the field of modern psychology. Conceptions of the nature of intelligence abound and they range from those that are empirically based (e.g., Spearman, 1927) to those that are proposed to be based on a synthesis of scholarly literature (e.g., Gardner, 1983). Spearheaded by the work of Alfred Binet (Binet & Simon, 1905; cited in Nicolas, Andrieu, Croizet, & Burman, 2013) numerous instruments have been developed to measure intelligence. Among the well-known instruments in their original versions are the Stanford-Binet, Binet-Simon's Test revised by Terman (1916; Terman & Merrill, 1937), and Wechslers' Intelligence Scales that include the Wechsler Adult Intelligence Scale (WAIS, Wechsler, 1955) and the Wechsler Intelligence Scale for Children (WISC, Wechsler,1949). A recent addition is the Woodcock Johnson Test of Cognitive Ability (WJTCA; Woodcock, 1993). Such measures yield scores that are normally thought of as IQ. All of these tests have been revised since their original publication, attesting to their popularity. The use of such measures, particularly the Wechsler scales, is commonplace in school settings. When children encounter difficulties or when a program decision arises, these tests are most likely administered and their scores influence intervention and decision making.

It is important to point out that measures of intelligence do not measure academic achievement; they are an indication of potential not production. Even in our field of gifted education, regardless of authors' attempts to distance giftedness from IQ scores, a high level of intelligence, sometimes called cognitive ability, is a core element in virtually all past and current conceptions of giftedness. Furthermore, a perusal of research in gifted education indicates that cognitive ability is commonly the sole criterion used by researchers to recruit participants who are gifted (e.g., Wirthwein, Becker, Loehr, & Rost, 2011; Yakmaci-Guzel & Akarsu, 2006). One does not have to delve too deeply into

the scholarly literature, or attend to general discourse, to find evidence of the privileged position that the construct of intelligence holds.

There have been attempts to deemphasize the importance of intelligence as it is commonly conceived. Among the more well-known attempts are found in the writings of Gardner (1983), Gladwell (2008), and Salovey and Mayer (1990). Gardner proposed a theory of multiple intelligences. Gardner argued that intelligence should be broadened beyond the logical mathematical type to include such abilities as artistic and kinesthetic. Gladwell, on the other hand, proposed that effort and opportunity are the predominant contributors to high achievement, not simply intelligence. He proposed that practice, 10,000 hours, and opportunistic factors displace intelligence as the primary contributors to prodigious productivity. In a similar vein, the work of Salovey and Mayer, pioneers of emotional intelligence, was used to place emotional quotient (EQ; Bar-On, 2000) in a pre-eminent position over IQ. In essence, this position proposes that EQ is a better predictor of success than IQ.

Intelligence and Giftedness: Diminished, not Disposed

The role of intelligence in giftedness differs in the literature in gifted education depending on whether we are dealing with theory, research, or practice. Regarding theory, the primacy of intelligence has declined in conceptions of giftedness. Historically, we see a movement from intelligence, that is, a superior level of intelligence as *the* defining characteristic of giftedness, to an emphasis on prodigious achievement as the defining criterion. In contrast to the area of theory, in the domains of research and practice, intelligence has generally maintained its pre-eminent position.

Theories of Giftedness

Our well-known and often-cited conceptions of giftedness first appeared in the literature in the 1970s. Two of the most popular conceptions are discussed here. To the sole criterion of intelligence evident in the pioneering work of Terman (1925), Marland (1972) added a number of other criteria including specific academic performance and leadership ability. Marland maintained the idea of potential, not only in his retention of intelligence (i.e., potential to achieve at a high level) but also in his statement that a student may be identified as gifted if she or he manifested potential for advanced achievement in any of the criteria listed. While Marland broadened the concept of giftedness beyond intelligence, he retained it as an independent criterion that can be used for identification of giftedness.

Renzulli (1978), on the other hand, proposed a view that intelligence alone was not sufficient: two other factors were essential, namely, task commitment and creativity. To be precise, Renzulli proposed that the interaction of above-average ability, task commitment, and creativity resulted in *gifted behaviour*—not giftedness. That is, intelligence alone, regardless of its magnitude, could not account for gifted behaviour. In retrospect, Renzulli laid the foundation for the emphasis on production rather than potential that can be seen in current conceptions of giftedness. The 1970s, then, represent two dramatic shifts from Terman's exclusive focus on giftedness as superior intelligence. Thus began the diminution of intelligence in theorizing about the nature of giftedness.

Recent theories extend the decreased importance of traditional intelligence and increased emphasis on productivity. To illustrate this trend, I briefly discuss two current theories. Sternberg (Sternberg, Jarvin, & Grigorenko, 2011) proposed a Pentagonal Theory in which five factors are essential for giftedness: excellence, rarity, value, productivity, and demonstrability. Sternberg's Theory of Giftedness does not have intelligence as a criterion. To meet the excellence criterion an individual must be superior in some dimension compared to her or his peers. A very high level of creativity, wisdom, or skill is an example of the domain of excellence. Rarity means that the dimension in which one is superior to others must be scarce. This means that the criterion cannot be met if everyone in a group is demonstrating ability at a very high level. Excellence and rarity have meaning in a social comparison context. The value criterion means that superior performance must be demonstrated in one or more areas valued by society. An individual demonstrating superior performance

as a criminal, for example, is not considered gifted since that activity is not valued by society. The criteria of productivity and demonstrability displace potential as an indication of giftedness. Without a manifestation of superior ability by producing something, an individual cannot be termed gifted.

It seems that the Pentagonal Theory is aimed at giftedness in adulthood: "In childhood, of course, it is possible to be labelled as gifted without having been productive. In fact, children are typically judged largely on potential [for productivity] rather than actual productivity" (Sternberg, Jarvin, & Grigorenko, 2011, p. 5). Lest we conclude that intelligence tests may be used to indicate potential for productivity, Sternberg went on to state: "Simply receiving high scores on an IQ test trivializes what it means to be gifted" (p. 5).

Subotnik, Olszewski-Kublius, and Worrell (2011) proposed a talent development model aimed at rectifying, among other things, the disconnect between giftedness in childhood and eminence in adulthood. Here is the conceptual foundation for their model:

Giftedness is the manifestation of performance that is clearly at the upper end of the distribution in a talent domain even relative to other high-functioning individuals in that domain. Further, giftedness can be viewed as developmental in that in the beginning stages, potential is the key variable; in later stages, achievement is the measure of giftedness; and in fully developed talents, eminence is the basis on which this label is granted. Psychosocial variables play an essential role in the manifestation of giftedness at every developmental stage. Both cognitive and psychosocial variables are malleable and need to be deliberately cultivated. (p. 3)

Similar to Sternberg's theory, Subotnik et al. emphasize a superior level of performance or productivity, when compared to other individuals, as an essential criterion for giftedness. In their developmental view of giftedness, they state explicitly that in childhood, cognitive ability as indicating potential to achieve at an extraordinary level is an acceptable criterion for giftedness. General cognitive ability is viewed as an essential factor in what is termed academic giftedness in children. This stance changes with development: "Although general ability and potential may be the hallmarks of academic giftedness in children, domain-specific ability and achievement become increasingly important as individuals develop" (p. 39). With age and particularly in adulthood, cognitive ability is no longer sufficient for giftedness. In other words, one may be gifted in childhood but not in adulthood, unless there is evidence of prodigious achievement.

Research and Practice in Gifted Education

Paradoxically, in our field, a dichotomy is more apparent in theory-research, rather than in the usual research-practice gap. The diminishing of intelligence in theories of giftedness has had little effect on research and practice in gifted education.

Researchers interested in variables related to gifted individuals and school personnel interested in selecting students for gifted education programs use intelligence in their selection of participants and students respectively. Researchers in gifted education use intelligence/cognitive ability as the selection criterion for gifted and non-gifted participants. In essence, this approach to selection of participants is similar if not identical to that used by the pioneer of the study of giftedness, Terman (1925). In the emergence of psychology of giftedness and gifted education, intelligence was paramount in the conception of giftedness. Pioneering the modern empirical study of giftedness in North America in the 1920s, Terman operationally defined giftedness in terms of intelligence as measured by the Stanford-Binet Test, as noted earlier, a measure of potential not achievement. For the purpose of his research, he used an IQ score of 140 or higher on the Stanford-Binet to identify participants as gifted.

Present-day researchers use the intelligence criterion directly through the use of test scores (e.g., Kettler, 2014; Olthouse, 2014; Peterson & Lorimer, 2011; Rubenstein, Siegle, Reis, Mccoach, & Burton, 2012; Snyder, Nietfeld, & Linnenbrink-Garcia, 2011) or indirectly through the use of enrolment in gifted-education programs as a criterion. However, intelligence test scores are commonly used as a major, if not sole criterion, for selection of

students for gifted education programs (Assouline & Luplowski-Shoplik, 2012). Ironically, then, there is a greater degree of similarity between research and practice in the field, than theory and research. Both researchers and practitioners continue to use Terman's approach to identifying gifted individuals, while current theorists proclaim intelligence as only one of several criteria needed for the construct of *giftedness*.

Theory of Positive Disintegration: Dethroning Intelligence

Dabrowski makes numerous references to intelligence in his exposition of TPD, though I have found no explicit conceptual definition in his books. It seems reasonable to assume that he shares the Wechsler's conception of intelligence because Dabrowski used the WISC and the WAIS in his research and practice (1972, 1996). Though a high level of intelligence is a prerequisite for advanced development (Dabrowski, 1970), such intelligence by no means guarantees that individuals reach the pinnacle of human development. In TPD, intelligence plays a subservient role. An examination of intellectual OE (overexcitability) and development in TPD supports this claim; further, such exploration of the theory answers the question: "To what is intelligence subservient?"

Intelligence and Intellectual Overexcitability (OE).

Dabrowski (1972) describes OE as a property of the central nervous system that produces "higher than average responsiveness to stimuli, manifested either by sensual, psychomotor, emotional (affective), imaginational, or intellectual excitability, or the combination thereof" (p. 303). When all five forms are present, individuals have the potential for accelerated or advanced development. However, when only sensual and psychomotor are present, development may not only be limited but negative outcomes may result (Mendaglio, 2012). Intellectual OE is one of the big three forms of OE because it, along with imaginational and emotional OE, is needed to attenuate the influence of the two lower forms, sparking development in individuals. Intellectual OE is designated as an essential ingredient for advanced development. Though intelligence is part of intellectual OE, Dabrowski emphasized that the two are not synonymous. Manifestations of intellectual overexcitability include a drive to ask probing questions, hunger for knowledge, theoretical thinking, respect for logic, and preoccupation with theoretical problems (Dabrowski, 1996). Intellectual OE, then, refers to *actual sophisticated* cognitive processing by an individual, not the cognitive *potential* assessed by operational definitions of intelligence commonly used in research and practice in gifted education.

Intelligence and Development.

Dabrowski relegated intelligence to a subservient role in daily functioning. Intelligence is simply a tool individuals use to achieve aims and goals. What an individual does with his or her intelligence depends on the type of development involved. Mendaglio (2012) presented the role of intelligence that is associated with *biological* (also termed *normal*), *one sided,* and *accelerated development*. Biological development represents the most common form. It is characterized by the maturational stages of human life; very little inner conflict and transformation are experienced. Disruptions of mental equilibrium are relatively few and short-lived. Intelligence serves individuals' satiation of drives, meeting needs while conforming to social conventions. One-sided development, as the name suggests, refers to development in which only some emotional and intellectual potentials develop. In this form of development, individuals may be endowed with only one or more OEs, but not all five forms.

There is both a positive and a negative version of one sided development (Dabrowski, 1996). On the positive side, individuals may demonstrate a high level of expression of one of the OEs. For example, individuals with a disproportionately high level of intellectual OE may make significant contributions in a field of study. With lower levels of the other OEs, development is considered limited because of the intense focus on one domain. Individuals who may have a disproportionately high level of emotional OE may become so identified and attached to others that they may lose their sense of self. On the negative side, psychopathy is also considered a form of one sided development. In this case, as with biological development, intelligence is in the service of the individuals' basic

drives which may create, for example, master criminals and dictators. Accelerated development requires the presence of high levels of all forms of OEs. In accelerated development, intelligence serves higher aims and values, such as altruism and authenticity. Different levels of intellectual functioning are associated with all three types of mental development. A hallmark of this form of development is individuals' taking control of their development such that they attain significant autonomy from biological instincts and drives and live their lives guided by universal moral values. In this form of development, intelligence is at the service of values such as responsibility for oneself and others.

The subservient role of intelligence can also be seen in the levels of development, which coincide with the types of development. Dabrowski proposed five levels of development: primary integration, unilevel disintegration, spontaneous multilevel disintegration, organized multilevel disintegration, and secondary integration. Dabrowski's levels indicate a progression from lower to higher moral human functioning, *though the progression is by no means linear or universal*. Similar to the types of development, the processes to which intelligence is subservient change with the level of development: in the course of development from Level I, primary integration, to Levels IV and V, the role of intelligence changes from serving lower drives and goals to higher aims and values.

Primary integration, Level I, is characterized by cognitive and emotional structures and functions that form a rigid mental organization. There is little evidence of introspection and questioning of one's life and surroundings. Cognitive and emotional structures are impulsive and automatic. Such mental organization leads to behaviour that is controlled by instincts and drives. Individuals are under the influence of the social environment leading to conformity and being concerned with social approval. In Level I, there is also a subset of individuals, presumably a small minority of the population, that are psychopathic, representing an extreme version of the use of intelligence for their egocentric ends. In primary integration, intelligence does not control primitive urges, but rather it "serves as an instrument subservient to the dictates of primitive drives" (Dabrowski, 1996, p. 78). In primary integration, intelligence is rigidly linked to primitive drives. Primary integration characterized by use of an individuals' resources, including intelligence, to satisfy biological drives and needs, represents a lack of development in Dabrowskian theorizing.

That intelligence does not reign supreme in TPD is clear in its articulation of the process of development, that is, positive disintegration. Development is triggered not by intellectual but rather by emotional factors. Dynamisms are the mechanisms of positive disintegration, consisting of destruction of lower functions and creation of higher functions. Two classes of dynamisms are essential components of the two aspects of positive disintegration: disintegrating dynamisms and developmental dynamisms. Disintegrating dynamisms are responsible for the loosening of the rigid mental organization of primary integration. Beginning with their emergence in Level II, unilevel disintegration, and continuing in Level III, spontaneous multilevel disintegration, the disintegrating dynamisms not only destroy the linkage of intelligence and drive satisfaction, they create inner conflict, or psychoneurotic conflict, deemed essential for development. The nature of disintegrating dynamisms is obvious in the terminology Dabrowski used to label them, for example, feelings of shame, feelings of guilt, astonishment with oneself, and dissatisfaction with self. Disintegrating dynamisms are negative emotional experiences and processes.

Developmental dynamisms are responsible for the replacement of lower mental structures with higher ones and culminating in the creation of personality, the apex of development in TPD. The nature of developmental dynamisms is also evident in the labels used to define them, for example, autonomy, authenticity, empathy, and responsibility. Developmental dynamisms are values that individuals at the highest levels of development in TPD use to guide their daily behaviour. The mechanisms of development, then, are emotions and values. Intelligence is an important construct in TPD, however, it is relegated to a servant role; at the most primitive level, intelligence serves drives and needs; at the most advanced level, it serves emotions and values.

Conclusion

Dabrowski does not reject the construct of intelligence; nor does he diminish its significance in human functioning. Intelligence is important. While other authors lessen the prominence of intelligence by adding other factors or variables, Dabrowski retains the construct and integrates it into his conception of human development. My understanding of Dabrowski's view of intelligence can be summed up as follows. Dabrowski does not say: Intelligence is no longer supreme because drives, needs, emotions and values are just as important in explaining development. He simply dethrones intelligence by saying: Drives and needs dictate what intelligence does at the lowest level of development; emotions and values dictate what it does at the highest levels of development. To what is intelligence subservient? The answer to that depends on the type and the level of development.

References

Assouline, S.G., & Lupkowski-Shoplik, A. (2012). The talent search model of gifted identification. *Journal of Psychoeducational Assessment*, *30*(1), 45-59. doi:10.1177/0734282911433946

Bar-On, R. (2000). Emotional and social intelligence: Insights from the Emotional Quotient Inventory (EQ-i). In R. Bar-On & J. D. A. Parker (Eds.). *Handbook of emotional intelligence* (pp. 363-388). San Francisco, CA: Jossey-Bass.

Dabrowski, K. (1967). *Personality-shaping through positive disintegration.* Boston: Little Brown.

Dabrowski, K. (1970). *Mental growth through positive disintegration.* London: Gryf.

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

Dabrowski, K. (1996). *Multilevelness of emotional and instinctive functions. Part 1: Theory and description of levels of behavior*. Lublin, Poland: Towarzystwo Naukowe Katolickiego Uniwersytetu Lubelskiego.

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books

Gladwell, M. (2008). *Outliers: The Story of success*. New York: Little, Brown and Company.

Kettler, T. (2014). Critical thinking skills among elementary school students: Comparing identified gifted and general education student performance. *Gifted Child Quarterly*, *58*(2), 127-136. doi:10.1177/0016986214522508

Marland, S. P., Jr. (1972). Education of the gifted and talented: Report to the Congress of the United States by the U.S. Commissioner of Education and background papers submitted to the U.S. Office of Education, 2 vols. Washington, DC: U.S. Government Printing Office. (Government Documents Y4.L 11/2: G36)

Mendaglio, S. (2012). Overexcitabilities and giftedness research: A call for a paradigm shift. *Journal for the Education of the Gifted*, *35*(3), 207-219. doi:10.1177/0162353212451704

Nicolas, S., Andrieu, B., Croizet, J., Sanitioso, R. B., & Burman, J. (2013). Sick? Or slow? On the origins of intelligence as a psychological object. *Intelligence*, *41*(5), 699-711. doi:10.1016/j.intell.2013.08.006

Olthouse, J. M. (2014). Gifted children's relationships with writing. *Journal for the Education of the Gifted*, *37*(2), 171-188. doi:10.1177/0162353214529044

Peterson, J., & Lorimer, M. R. (2011). Student response to a small-group affective curriculum in a school for gifted children. *Gifted Child Quarterly*, *55*(3), 167-180. doi:10.1177/0016986211412770

Renzulli, J. S. (1978). What makes giftedness? Reexamining a definition. *Phi Delta Kappan, 60*(3), 180-184. Retrieved from http://eric.ed.gov

Rubenstein, L., Siegle, D., REIS, S. M., Mccoach, D., & Burton, M. (2012). A complex quest: The development and research of underachievement interventions for gifted students. *Psychology in the Schools*, *49*(7), 678-694. doi:10.1002/pits.21620

Salovey, P., & Mayer, J. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, *9*(3), 185-211. doi:10.2190/DUGG-P24E-52WK-6CDG

Snyder, K. E., Nietfeld, J. L., & Linnenbrink-Garcia, L. (2011). Giftedness and metacognition: A short-term longitudinal investigation of metacognitive monitoring in the classroom. *Gifted Child Quarterly*, *55*(3), 181-193. doi:10.1177/0016986211412769

Spearman, C. (1927). *The abilities of man: Their nature and measurement* (2nd ed.). London: Macmillan.

Sternberg, R.J., Jarvin, L., & Grigorenko, E.L. (2011). *Explorations in giftedness*. New York: Cambridge University Press.

Subotnik, R.F., Olszewski-Kublius, P., & Worrell, F.C. (2011). Rethinking giftedness and gifted education: A proposed direction forward based on psychological science, *Psychological Science in the Public Interest, 12*(1), 3-54. doi:10.1177/1529100611418056

Terman, L.M. (1916). *The measurement of intelligence: An explanation of and a complete guide to the use of the Stanford revision and extension of the Binet-Simon Intelligence Scale*. Boston: Houghton Mifflin.

Terman, L.M. (1925). *Genetic studies of genius: Mental and physical traits of a thousand gifted children*. Palo Alto, CA: Stanford University Press.
Terman, L. M., & Merrill, M. A. (1937). *Measuring intelligence: A guide to the administration of the new revised Stanford-Binet tests of intelligence*. Oxford, England: Houghton Mifflin.
Wechsler, D. (1949). Wechsler Intelligence Scale for Children: Manual. New York, NY: Psychological Corporation.
Wechsler, D. (1958). *The measurement and appraisal of adult intelligence*. Baltimore, MD: Williams and Wilkins.
Woodcock, R. W. (1997). The Woodcock-Johnson Tests of cognitive ability—Revised. In D. P. Flanagan, J. L. Genshaft, & P. L. Harrison (Eds.), *Contemporary intellectual assessment: Theories, tests, and issues* (pp. 373-402). New York: Guilford.
Wirthwein, L., Becker, C.V., Loehr, E-V., & Rost, D. H. (2011). Overexcitabilities in gifted and non-gifted adults: Does sex matter? *High Abilities Studies*, *22*(2), 145-153. doi: 10.1080/13598139.2011.622944
Yakmaci-Guzel, B., & Akarsu, F. (2006). Comparing overexcitabilities of gifted and non-gifted 10th grade students in Turkey, *High Ability Studies*, *17*(1), 43-56. doi: 10.1080/13598130600947002

About the Author

Sal Mendaglio, Ph.D., holds the rank of professor in the Werklund School of Education, University of Calgary (mendagli@ucalgary.ca). Sal's primary interest is the psychology of giftedness with particular emphasis on Dabrowski's theory of positive disintegration. He is a registered psychologist with many years of experience counselling gifted individuals.

Address

Prof. Dr. Sal Mendaglio,
Werklund School of Education;
University of Calgary;
Calgary, Alberta, Canada.

e-Mail: mendagli@ucalgary.ca