

Perspectives

Borderline Intellectual Functioning and the Intellectual Disability Construct

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Wehmeyer et al. (2008) recently published a particularly instructive paper in this journal on the construct of intellectual disability. The authors carefully distinguished between operational definitions of the term and those intended to describe and explain the potential basis for the condition; the latter they referred to as *constitutive*. They also discussed a multidimensional model of human functioning as a preferred way of conceptualizing intellectual disabilities, particularly in contrast to those that have been based on biological traits and defects. However, although they asserted that there are differences at the level of construct between the terms *intellectual disability* and *mental retardation*, they reaffirmed Schalock et al.'s (2007) point that this does not translate into any difference in the diagnostic process and that “the term intellectual disability covers the same population (as those) diagnosed previously with mental retardation in number, kind, level, type, and duration” (p. 317). The authors also called for input from the field in preparation for the upcoming manual on *Definition, Classification and Systems of Support*. This article provides input by calling attention to *borderline intellectual functioning*, a term referring to a potentially large group of people who may also manifest intellectual disabilities. I begin with a brief overview of the history of the term and then address the need for meaningful dialogue of this issue, both to enhance understanding of the intellectual disability construct and to refine clinical practice and education while developing a clear agenda for reinvigorated research.

A Brief History

Although space does not permit a comprehensive review of the history of terms and definitions used to identify “mental retardation,” it is sufficient

to say that what has been considered to represent a “significant limitation” in intellectual functioning and adaptive behavior required to meet the definition of the term has changed over time (for additional coverage see Neri & Tiziano, 2005; Scheerenberger, 1987). As readers are probably familiar, some definitional changes helped to clarify the nature of functional and adaptive deficits, whereas others facilitated intervention programs and education, reduced stigma, and in some cases radically changed diagnostic procedures (Lollar & Simeonsson, 2005; Schalock et al., 2007).

One historical development of great relevance to this article occurred in 1973 when the “borderline mental retardation” classification was dropped. This change came about largely in response to criticism about the overinclusiveness and consequent high prevalence rates. As the American Association on Intellectual and Developmental Disabilities (then known as the American Association on Mental Deficiency) revised guidelines (Grossman, 1973), four rather than five intellectual disability levels were included: *mild* (IQ = 52–67), *moderate* (IQ = 36–51), *severe* (IQ = 20–35), and *profound* (IQ <20); the deletion of the borderline level and changes in IQ scores dramatically reduced the size of the population diagnosed with intellectual disability. However, as some would later assert, this was done by “declassifying” more than 80% of persons who previously scored between one and two standard deviations below the statistical average (Zetlin & Murtaugh, 1990).

Shortly after the “declassification” of persons with borderline intellectual disability, a large swell in those identified with a specific learning disability began to appear. For example, between 1976 and 1992, the number of children identified with learning disabilities in schools increased by 198%. At the same time, there was a 41% decrease in diagnoses of

intellectual disabilities (McMillan, Gresham, & Bocian, 1998). Since then, the ranks of children and adults with learning disabilities have continued to grow. Today, learning disabilities have become the highest incidence designation for special education, with more than 3 million students nationally (U.S. Department of Education, 2006).

That the growing tide of learning disability diagnoses in childhood was in part a result of changes in classification for intellectual disability is hardly arguable, although some (i.e., Hallahan, 1992) have said that other factors, such as a clinician's increased sensitivity to learning disabilities coupled with increased developmental risk (e.g., from maternal substance abuse), may be operative. However, research has not supported these views. For example, Gottlieb et al. (1994), in a 10-year study of an urban sample from New York, found that more than 40% of children identified as having learning disabilities actually had IQs in the borderline range (between 70 and 84), a range they contended would have, in the past, identified those students as having intellectual disabilities. In 1998, MacMillan, Gresham, and Bocian reported that schools had often identified children as having learning disabilities based on low IQ and achievement scores only, whether or not there was a discrepancy present. They also showed that about 1 in 10 students had performed in the "mild mental retardation" range though they were identified as having learning disabilities.

Policy development in other areas was also effected by this change to intellectual disability classification. For example, in federally funded programs such as vocational rehabilitation, adults with intellectual disabilities were not typically included but adults with learning disabilities were made eligible by 1981. Later, accommodations for college students with learning disabilities and for adults in the workplace followed, with the Americans With Disabilities Act in 1990. I call attention to these examples to illustrate that our models of intellectual disability also influence policy and research. As the field pauses to examine the construct, borderline intellectual disabilities should be part of the discussion.

Definition and Diagnosis of Borderline Intellectual Functioning

The manual *Mental Retardation: Definition, Classification and Systems of Supports*, by the Amer-

ican Association on Intellectual and Developmental Disabilities (AAIDD; Luckasson et al., 2002), and the *Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV)* (American Psychiatric Association, 1994) remain two of the authoritative guidelines for use in the definition and diagnosis of intellectual disabilities. In the *DSM-IV*, IQ test scores that range from 71 to 84 constitute a level of performance known as *borderline intellectual functioning*. When used as a clinical designation, it is assigned as a "V" code when attention is warranted for problems associated with subaverage intellectual performance (American Psychiatric Association, 1994). By itself, borderline intellectual functioning is neither a mental disorder nor typically considered a form of disability, although it was thought at one time to fall within the distribution of scores signaling intellectual disability.

The number of persons who function in the borderline intellectual range is often underappreciated and has at times even been grossly misreported in both the lay and professional literatures (see Ninivaggi, 2001, p. 7, where it is said to be about "seven percent"). Based on a theoretical estimate for a normal distribution of psychometric intelligence, IQ scores in the borderline range occur roughly 13.6% of the time. With a U.S. population of at least 300 million, this translates into at least 40 million individuals in America who likely have IQ test scores in the borderline range. Of course, the majority of these persons do not require the attention of a mental health professional, special educator, social service agent, or any clinical assistance strictly because of their intellectual level. However, there is still reason to believe that persons with borderline intellectual functioning face substantially elevated morbidity risks and some have intellectual disabilities.

Research on Borderline Intellectual Functioning

The diagnostic term *borderline intellectual functioning* has been available for approximately 3 decades; however, published research that has targeted borderline intellectual functioning as a clinical entity or that has set out to examine outcome variables (i.e., medical, educational, or vocational) in association with it has been sparse. Research has shown that borderline intellectual functioning is developmental, can be present in

both children and adults, and can be a factor associated with relatively poor outcomes in psychiatric disorders (Hassiotis et al., 2006; Koenen et al., 2009), school settings (Macmillian et al., 1998), and such things as the likelihood of release from prison following crimes (Linhorst, 1999). Both children and adults with confirmed borderline intellectual functioning have been shown to be more represented in populations with greater psychopathological risk (Masi, 1998; Ninivaggi, 2001), in populations demonstrating vocational and school problems (Dunham & Schrader, 2000), and in populations with an increased likelihood of multidrug pharmacotherapy for disruptive behavior disorders (Stolker et al., 2001). Borderline intellectual functioning has also been demonstrated as a common comorbidity (Ferrari, 2007; Handen, Janosky, & McAuliffe, 1997) and a challenging factor for quality of life in medical treatments (Chen et al., 2006).

Despite notable exceptions (e.g., Tymchuck, Lakin, & Luckasson, 2001), few books have systematically addressed the social, psychological, and contextual circumstances of persons with these types of “mild” cognitive impairments. In some respects, this may not be surprising. For example, from the perspective of health care, work, and education, borderline intellectual functioning, if diagnosed, is a V-code designation and, consequently, does not justify direct clinical care, come with any guarantee of third-party insurance payment, or drive any educational classification or expectations of “reasonable accommodations.” According to the National Research Council (2002), “There is no alternative Social Security classification for individuals with composite IQs of 71–85 without associated functional limitations, and therefore these individuals do not meet SSI eligibility criteria for mental retardation” (pp. 265–266).

Discussion and Conclusion

As the field moves forward in conceptualizing the construct of intellectual disabilities, one which is multidimensional and incorporates other major life activities (Wehmeyer et al., 2008), it is time to revisit the nature of the operational cut-offs that have been applied to, at least, the intellectual and adaptive behavioral dimensions. Persons who have what is sometimes referred to as borderline intellectual functioning remain an underrecog-

nized, often misdiagnosed, marginalized group who are at considerable risk for academic difficulties, vocational challenges, poor adaptation, and the development of psychopathology. In recent decades, there has been minimal attention directed to this population and little in the way of careful research. Just as there is little to no neuropsychology of intellectual disabilities (Pennington & Bennetto, 1998) that considers anything more than the cognitive deficits to be general in this group, there is little of the neuropsychology of borderline intellectual functioning and associated conditions (e.g., specific learning disabilities). Instead, our contemporary understanding of borderline intellectual functioning is based on a relatively static view of intellectual development, with little emphasis on qualitative features, adaptive behavior, and factors such as executive functioning in real-world contexts.

Any reconceptualization of intellectual disabilities that seeks to distinguish this construct from “mental retardation” but still holds to the same practices of diagnosis and treatment that have been developed for mental retardation may miss a great opportunity for significant policy development and a better understanding of those persons affected by intellectual disabilities. It is my hope that, while recognizing that the construct has “marked impact on how society responds to people who manifest intellectual disability” (Wehmeyer, et al., 2008, p. 317), movements toward a more functional definition will carefully consider those whom we now see as having borderline intellectual functioning.

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