

# Perspectives

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## The Intellectual Disability Construct and Its Relation to Human Functioning

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The American Association on Intellectual and Developmental Disabilities' (AAIDD) Terminology and Classification Committee has two primary purposes in publishing this Perspective: (a) to share our thinking about the construct underlying the term *intellectual disability* (henceforth the *intellectual disability construct*) and its relation to human functioning and (b) to ask for input from the field because the committee is preparing a proposal for the upcoming *Definition, Classification and Systems of Supports* manual, to be published in 2009 or 2010. The article has three sections.

In the first section, we make a distinction between an operational definition, which operationalizes the intellectual disability construct and provides the basis for diagnosis and classification, and a constitutive definition, which explains the underlying construct and provides the basis for theory-model development and planning individualized supports. In the second section, we provide an historical overview of how the construct underlying the term *mental retardation* (henceforth, the *mental retardation construct*) differs from the construct underlying intellectual disability. In the third section, we describe the parameters to the proposed AAIDD theoretical framework of human functioning that reflects our current understanding of the multidimensionality of human functioning that underlies the intellectual disability construct and the significant role that individualized supports play in human functioning. The article concludes with a brief discussion of the benefits to the field that accrue from a clear understanding of both the differences between an operational and constitutive definition and the fundamental properties of the intellectual disability construct.

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### Operational Versus Constitutive Definitions

Among the primary tasks of the AAIDD Committee on Terminology and Classification are naming and defining. With regard to the first task, Schalock et al. (2007) explained in the first of a planned series of articles by the committee (of which this is the second) that the AAIDD committee shifted from using the term *mental retardation* to the term *intellectual disability* because the latter term more accurately reflects the underlying construct currently being used to frame what is meant by *disability* (Luckasson et al., 2002; World Health Organization, 1999, 2001). With regard to the committee's second task, it is important to realize that the process of defining occurs at two levels: operational and constitutive.

We define a *construct* as “an abstract or general idea that is formed by arranging parts or elements, based on observed phenomena, in the context of a theory” (Schalock et al., 2007, p. 116). In other words, constructs are ideas that are, literally, “constructed” from observed phenomena or behavior. Constructs are not themselves directly observable. One cannot see or directly measure constructs such as motivation, self-concept, or intelligence. These constructions or ideas are latent; we infer they are present, but they exist only as a potential because we can never see nor measure them directly. Their ongoing use is a function of their heuristic utility and clarity, and they are measured via proxy indicators.

Psychology has a history of defining constructs in multiple ways, particularly with regard to the

construct's relationship to other constructs—referred to as *constitutive* or *theoretical definitions*—and with regard to the operations or properties with which the construct can be observed or measured—referred to as *operational definitions* (Hubert et al., 1982; Liksa, 1969; Swanson, 1991). For example, Kaufmann (1945) identified two “different and complementary facets of science, namely theory and testing” (p. 49) and observed that “there corresponds a specific type of definition of scientific concepts: the definitions which relate to theories are called *constitutive definitions*; those which relate to empirical testing are called *operational definitions*” (p. 49, italics in original). Similarly, in critiquing an early definition of learning disabilities, Swanson (1991) observed that it was “not an operational definition, because it does not specify the operations or procedures by which the construct of learning disabilities can be recognized and measured” (p. 242) and, in contrast, classified the earlier definition as a theoretical definition.

We believe that the distinction between constitutive and operational definitions is helpful in understanding intellectual disability and its relation to human functioning. For our purposes, an operational definition defines a construct in ways that it can be observed and measured. An operational definition aids in tasks related to diagnosis and classification. For example, the operational definition of intellectual disability, which Schalock et al. (2007) stated will remain in effect for now and in the foreseeable future, defines intellectual disability as “characterized by significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills. This disability originates before age 18” (p. 118).

This operational definition of the intellectual disability construct has some elements that refer to other constructs, such as intellectual functioning and adaptive behavior, but even then these constructs are modified by the notion of significant *limitations*, which itself is defined in terms of standard deviations below the mean and, therefore, is operational in nature. Thus, despite some constitutive elements, this definition is essentially operational. It operationally defines the construct as characterized by limitations in intellectual functioning and adaptive behavior as evidenced by scores below a certain point on measures of these two constructs and as occurring prior to the age of 18 years.

In contrast, constitutive definitions define the

construct in relation to other, related constructs and, thus, help us better understand the theoretical underpinnings of the construct. In this Perspective, we do not intend to focus on issues of the operational definition or naming but on constitutive issues pertaining to understanding the construct, or idea, that the term intellectual disability names. In the following section, we explore how the use of the term intellectual disability refers to a different construct than did the term it replaced (i.e., mental retardation).

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## Historical Overview of the Mental Retardation and Intellectual Disability Constructs

### *The Mental Retardation Construct*

Scientific constructs are named, and the term selected for that name is intended to reflect to the greatest degree possible the general idea(s) underlying the construct (Luckasson & Reeve, 2001). Names for constructs are not arbitrarily assigned in science; in selecting a term, the intent is to capture as effectively as possible the intent of the construct to which the name–term refers.

All prior names referring to the construct mental retardation, including the terms that immediately preceded it (e.g., mental deficiency, mental subnormality), attempted to provide a descriptive label or name for an underlying construct that shared several theoretical assumptions. The first such assumption was that the disability resided within the person. To have mental retardation was to be defective. The loci of that defect was the mind. The term *mental*, which is common to all of these terms, means of or pertaining to the mind. The nature of the defect of the mind (mental deficiency) was inferior mental performance (mental subnormality) characterized by mental slowness (mental retardation).

This notion of the defect of the mind resulting in inferior mental performance characterized by mental slowness is evident in most of the writings from the period in the early 20th century in which the construct that was eventually labeled mental retardation emerged. For example, Henry Herbert Goddard, a member of the first Terminology and Classification Committee commissioned by what is now AAIDD, wrote in 1907 that, “Psychology has already gone far enough in the study of normal minds to discover that there are many problems

that can only be answered by a study of defective minds, minds that have slowed down, so to speak, and are moving so as to be easily observed” (p. 19).

The mental slowness that constituted the nature of the disability was, through the efforts of Goddard and others, eventually diagnosed as a discrepancy between chronological age (CA) and mental age (MA; although the calculation of an MA metric was a development that postdated Goddard). Eventually, mental slowness was inferred from the discrepancy between CA and MA. To be labeled as *mentally deficient*, *mentally subnormal*, or *mentally retarded*, one had to evidence slowed or delayed mental performance in the form of that MA–CA discrepancy.

Perhaps the most obvious indicator that the construct underlying the above terms referred to defects of mind (which resulted in impaired mental performance characterized by mental slowness) was the eventual agreement on the term mental retardation to name the underlying construct. The noun *retardation* refers to the act of retarding. Retard is a verb meaning to slow down or delay. In fact, the earliest use of the term retarded or retardation in reference to a person’s performance—in Leonard Ayres’ classic text *Laggards in Our Schools: A Study of Retardation and Elimination in City School Systems*, which was published in 1913—did not use the term to refer to a form of feeble-mindedness at all. *Laggards in Our Schools* was a study of dropout and graduation rates in urban school districts. Students who failed to progress from one grade to the next were referred to as laggards or as retarded; yet the term retarded referred only to the fact that they were delayed with regard to their progress through the grades and not to any internal defect or feeble-mindedness. Only later did the term retarded shift from referring to the event or circumstance of not progressing from one grade to the next to referring to the student or person who was mentally slow and not progressing. Mental retardation was a term meaning, literally, mental slowness, and it was used to name an underlying construct or idea in which defects of the mind resulted in performance limitations characterized by mental slowness.

It is worth noting that conceptualizations of the condition prior to the 1910 classification system introduced by Goddard and colleagues (“idiot,” “imbecile,” “moron”) attempted to deal with the diverse etiological factors resulting in feeble-mindedness. For example, physician Arthur Wylie, superintendent at the Institution for the Feeble-

Minded in Grafton, North Dakota (who, like Goddard, was a member of the original committee on classification), recommended to the committee chairperson, Walter Fernald, that the classification system include the terms *psycho-asthenia*, *amentia*, and *mental debility* as alternatives to the traditional idiot, imbecile, and feeble-minded group terms; but, then, he also recommended that clinical subgroups, including *microcephalous*, *hydrocephalous*, *Mongolian*, and *cretin*, among others, be appended to the group terms, as well as adding the label *moral imbecile* to the highest functioning group of people identified as feeble-minded. Given that virtually every institution superintendent involved in the association then was a physician, it is not surprising that there was considerable interest in and attempts to incorporate information about etiology into terminology and classification efforts. Such efforts inevitably resulted in classification systems like that proposed by Wylie, which were so complex as to be of only limited use. In the end, the classification decision eschewed linking etiology to what was essentially a diagnosis of impaired (slow) mental performance as manifested by limitations in human functioning. That subsequent classification systems added the requirement of deficits in social and adaptive functioning simply reinforces the fact that, from the beginning, what we now term intellectual disability has had as an underlying construct the notion of *limitations in human functioning*. It is a disability determined by indicators of performance linked to limitations in human functioning.

### *The Intellectual Disability Construct*

In 1992, the American Association on Mental Retardation (AAMR; now AAIDD) Terminology and Classification Committee adopted a functional model of human functioning but kept the term mental retardation for a number of reasons (Luckasson et al., 2002, pp. xii–xiii). The model proposed that the disability was manifested as a state of functioning that existed within the fit between the person’s capacities and limitations and the context in which the person functions. As such, the committee was not inventing a new idea but was recognizing what was accepted all along: Intellectual disability involves limitations in human functioning. What was, however, dramatically different with the construct underlying the term intellectual disability when compared with the construct underlying the term mental retardation was where the disability resided; the former (mental retardation) viewed the

disability as a defect within the person, whereas the latter (intellectual disability) viewed the disability as the fit between the person's capacities (implied in that is limited capacity as a function of neural impairment) and the context in which the person functioned. The term mental retardation referred to a condition internal to the person (e.g., slowness of mind); intellectual disability refers to a state of functioning, not a condition. Both constructions, however, see the condition (as in mental retardation) or the state of functioning (as in intellectual disability) as best defined, constitutively and operationally, in terms of limitations in typical human functioning.

The term *disability* is an umbrella term for limitations in human functioning. The origin of the present interpretation of the term disability lies in an extension of the medical model that originally conceived health as an interiorized state and health problems as an individual pathology: a problem within the person. In the context of health and health care, however, it became evident that individual pathology offered a far too narrow perspective for effectively describing, understanding, and addressing the problems of people affected by a chronic or pervasive health condition. Wood (1989) and his collaborators offered an extension of the medical model by presenting a multidimensional model of human functioning in the *International Classification of Impairments, Disabilities, and Handicaps (ICIDH; World Health Organization, 1980)*. The *ICIDH* proposed different perspectives or planes of experience for looking at human functioning and for describing the consequences of diseases.

Within this perspective, *human functioning* refers to all the life activities of a person. The *ICIDH* (World Health Organization, 1980) perspective for describing the impact of a health condition or pathology on human functioning was (a) the exteriorization of a pathology in body anatomy and functions (e.g., as pertaining to intellectual disability, central nervous system, and intelligence), (b) objectified pathology as expressed in the person's activities (e.g., adaptive behavior skills), and (c) the social consequences of pathology (e.g., participation in social life domains; World Health Organization, 1980, p. 30). Later, it was recognized that in addition to the impact of health condition factors (pathology), contextual factors are pivotal for understanding human functioning. Contextual factors are composed of environmental and personal factors. It

was also understood that limitations in human functioning are not necessarily linear or causal consequences of a pathology but should be conceived as multiple interactive processes where each factor can influence the dimensions of functioning and other factors, either directly or indirectly. By adding environmental factors and personal factors, a broader descriptive model of human functioning was created in the *ICIDH* successor, the *International Classification of Functioning, Disability, and Health (ICF; World Health Organization, 2001)*.

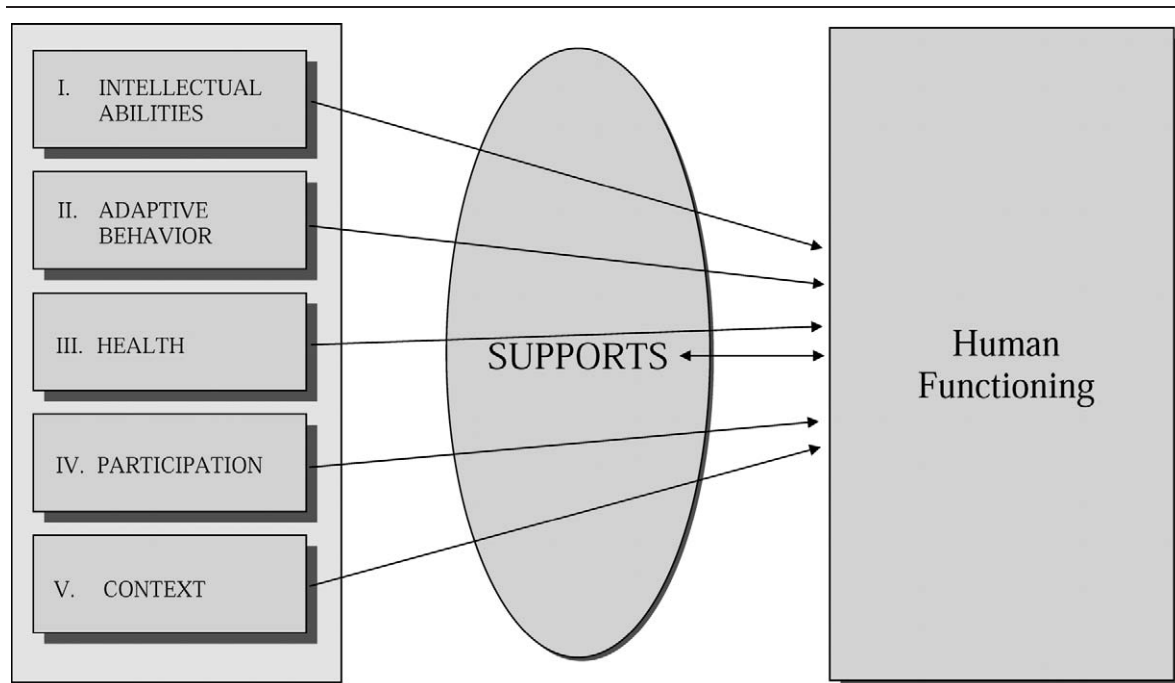
### AAIDD Proposed Theoretical Framework of Human Functioning

A multidimensional model of human functioning was first proposed by AAIDD (formerly AAMR) in the 1992 manual (Luckasson et al., 1992) and further refined in the 2002 manual (Buntinx, 2006; Luckasson et al., 2002). An additional refinement is shown in Figure 1. As shown in the figure, the theoretical framework of human functioning has two major components: five dimensions (intellectual abilities, adaptive behavior, health, participation, and context) and a depiction of the role that supports play in human functioning. Each of these components is described below and on subsequent pages.

#### Human Functioning

Consistent with the *ICF* model (World Health Organization, 2001), human functioning is an umbrella term for all life activities of an individual and encompasses body structures and functions, personal activities, and participation. Limitations in functioning are labeled a *disability* that can result from problem(s) in body structures and functions and personal activities. For purposes of understanding what intellectual disability refers to, the *ICF* domains of *body functions* (impaired intellectual functioning) and *activities* (limitations in adaptive behavior) are important because they refer to the diagnostic criteria specified in the operational definition of intellectual disability. However, for understanding (a) individual functioning of a person with intellectual disability within a larger context and (b) the constitutive definition underlying the term intellectual disability, all dimensions of functioning and impacting factors are important.

*Dimension 1: Intellectual Abilities.* Intelligence is a general mental capability. It includes reasoning, planning, solving problems, thinking abstractly,



**Figure 1** A multidimensional model of human functioning.

comprehending complex ideas, learning quickly, and learning from experience (Gottfredson, 1997). As reflected in this definition, intelligence is not merely book learning, a narrow academic skill, or test-taking ability. Instead, intelligence reflects a broader and deeper capacity for comprehending our surroundings—catching on, making sense of things, or figuring out what to do. Thus, the concept of intelligence represents an attempt to clarify, organize, and explain the fact that individuals differ in their ability to understand complex ideas, to adapt effectively to their environments, to learn from experience, to engage in various forms of reasoning, and to overcome obstacles by thinking and communicating (Neisser et al., 1994). This understanding of intelligence was first adopted within the AAMR/AAIDD terminology and classification manuals by Grossman in 1983. It is also consistent with the ICF definition of intellectual functions (Section b117) as general mental operations required to understand and constructively integrate the various mental functions, including all cognitive functions and their development over the life span (World Health Organization, 2001).

*Dimension 2: Adaptive Behavior.* Adaptive behavior is the collection of conceptual, social, and practical skills that people learn to function in their

everyday lives (Luckasson et al., 2002). The concept of adaptive behavior (as expressed in conceptual, social, and practical adaptive skills) is a continuation of the historical attention given to adaptive behavior in the diagnosis of mental retardation–intellectual disability (Schalock et al., 2007). The concept of adaptive skills implies an array of competencies and provides the foundation to two key points: (a) Adaptive skill limitations often coexist with strengths in other adaptive skill areas, and (b) a person's strengths and limitations in adaptive skills should be documented within the context of community and cultural environments typical of the person's age peers and tied to the person's individualized needs for support.

*Dimension 3: Health.* The World Health Organization (1990, 1993) defined *health* as a state of complete physical, mental, and social well being. Health is a component of an integrated understanding of individual functioning, because the health condition of an individual can affect his or her functioning directly or indirectly in each or all of the other four dimensions. Health-condition problems are disorders, diseases, or injuries and are classified in the *International Statistical Classification of Diseases and Related Health Problems (ICD-10; World Health Organization, 1999)*. A subsequent

article by the Terminology and Classification Committee will present in more detail the committee's proposed health framework that includes (a) how health affects issues related to diagnosis, (b) how health affects classification-related issues (including classification based on etiology), and (c) the components to a community health supports model.

*Dimension 4: Participation.* *Participation* is the performance of people in actual activities in social life domains and is related to the functioning of the individual in society. It refers to roles and interactions in the areas of home living, work, education, leisure, spiritual, and cultural activities. Participation also includes social roles that are valid activities considered normative for a specific age group. Participation is best reflected in the direct observation of engagement and the degree of involvement in everyday activities.

*Dimension 5: Context.* Contextual factors include environmental factors and personal factors and that represent the complete background of an individual's life. They may have an impact on the individual's functioning that need to be considered in the evaluation of human functioning.

- *Environmental factors* make up the physical, social, and attitudinal environment in which people live and conduct their lives. Environmental factors sometimes act as facilitators when, in interaction with personal factors, they contribute to the accomplishment of adapted behavior. For example, positive employees' attitudes and accessibility ramps act as facilitators when contributing to an adapted behavior such as working. On the other hand, the absence of such facilitators or presence of other environmental factors, such as negative attitudes or inaccessible buildings, can hinder the accomplishment of adapted behaviors such as working. Under these circumstances, environmental factors are referred to as *barriers*.
- *Personal factors* are characteristics of a person such as gender, race, age, motivation, lifestyle, habits, upbringing, coping styles, social background, education, profession, past and current experiences (past life events and concurrent events), character style, individual psychological assets, and other characteristics, all or any of which may play a role in disability at any level. They are composed of features of the persons that are not part of a health condition or health state.

*Supports.* Human functioning is typically enhanced through the use of individualized *supports*

that are defined as "resources and strategies that aim to promote the development, education, interests, and personal well-being of a person and that enhance individual functioning. Services are one type of support provided by professionals" (Luckasson et al., 2002, p. 145).

Contextualism, or the context within which supports are given, is a critical concept in understanding the current use of supports, the supports paradigm, and the influence of external factors on one's functioning. Contextualism has three central themes (Luckasson et al., 2002, p. 149): (a) One appreciates the milieu, circumstances, environment, or perspective within which behavior occurs; (b) reality is ongoing and changing and involves the environment being transformed by its members, who are, in turn, transformed by the environment; and (c) the person plays an active role in his or her development and functioning. These three themes are evident in the ecological and egalitarian bases of supports.

*The ecological basis of supports.* There is clear evidence that human functioning is facilitated by the congruence between individuals and their environments. Facilitating such congruence involves determining the profile and intensity of needed supports for a particular person and providing the supports necessary to enhance human functioning. This social-ecological model is consistent with the current concept of intellectual disability that views the disabling process as a relationship among pathology, impairments, and one's environment (Institute of Medicine, 1991; Luckasson et al., 1992, 2002; World Health Organization, 2001).

*The egalitarian basis of supports.* *Egalitarianism* is the belief in human equality, especially with respect to social, political, and economic rights. Since the 1960s, the egalitarian movement has emerged from both legal and service delivery perspectives. Legally, people with intellectual disability have the right to free and appropriate public education, community-based services, and freedom from discrimination solely on the basis of their disability. Programmatically, the egalitarian movement is reflected in person-centered planning, self-advocacy, personal empowerment, and an emphasis on person-referenced outcomes. The net result of these legal and service-delivery trends has been to stress the role that appropriate supports play in enhancing human functioning.

## Conclusion

In conclusion, the field of intellectual and developmental disability benefits from a clear understanding of both the difference between an operational and constitutive definition of a construct such as mental retardation–intellectual disability and the fundamental properties of the intellectual disability construct. Over the last 50 years, for example, there has been a remarkable consistency in the operational definition of the construct that is now named intellectual disability. The minor changes that have occurred in the operational definition primarily reflect two phenomena (Schalock et al., 2007, p. 119): (a) advances in understanding intellectual functioning and adaptive behavior (Dimensions 1 and 2 in Figure 1) and (b) advances in measurement theory and strategies that permit the use of statistical procedures to control for measurement error, practice effects, and normative changes.

In this article, we have focused primarily on understanding the constitutive, or theoretical, definition of the intellectual disability construct. Such a definition refers to a multidimensional state of human functioning as opposed to the trait or *defect of the mind* conception of mental retardation. The advantages to understanding the multidimensional nature of intellectual disability are many. For example, understanding encourages one to recognize and appreciate the vast biological and social complexities associated with intellectual disability (Baumeister, 2005; Switzky & Greenspan, 2005); it captures the essential characteristics of a person with this disability (Simeonsson et al., 2005); and it provides a solid conceptual basis to differentiate among persons with other cognitive and developmental disabilities (Thompson & Wehmeyer, 2008).

Although the operational definition of intellectual disability has not changed, we contend that the underlying construct named by the term *intellectual disability* is not the same as the underlying construct named by the term *mental retardation*. Although the differences do not manifest themselves in the actual diagnostic process—that is, the diagnostic process remains the same—as Schalock and colleagues (2007) stated, the term intellectual disability “covers the same population of individuals who were diagnosed previously with mental retardation in number, kind, level, type, and duration of the disability and the need of people with this disability for individualized services and supports” (p. 116). The changing understanding of disability re-

flected in the term intellectual disability, however, has marked impact on how society responds to people who manifest intellectual disability. The adoption of the term intellectual disability implies an understanding of disability consistent with an ecological and multidimensional perspective and requires that society responds with interventions that focus on individual strengths and that emphasize the role of supports to improve human functioning. Furthermore, our theoretical framework of human functioning recognizes that the manifestation of intellectual disability involves the dynamic, reciprocal engagement among intellectual ability, adaptive behavior, health, participation, context, and individualized supports.

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