

# DEFINING AND DETERMINING INTELLECTUAL DISABILITY (INTELLECTUAL DEVELOPMENTAL DISORDER): INSIGHTS FROM DSM-5

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**Abstract:** Over years, the terms used to identify intellectual disability, which was previously known as “mental retardation,” have changed. This has been due to the heavy stigma associated with bearing its label (Tassé & Mehling, in press). This article examines defining and determining intellectual disability (intellectual developmental disorder). The focus is on the Diagnostic Criteria in DSM-5 diagnostic features, associated features supporting diagnosis, and prevalence are discussed.

**Keywords:** intellectual disability (intellectual developmental disorder), DSM-5 diagnostic criteria, associated features supporting diagnosis, prevalence.

**Mourad Ali Eissa Saad, PhD**  
Full Professor of Special Education  
Vice President of KIE University  
Kie University  
Egypt  
Contact:  
E-mail: profmouradali@gmail.com

**Adel M. ElAdl, PhD**  
Full Professor of Educational Psychology  
Sultane Qaboos University  
Oman  
Contact:  
E-mail: eladladel5@gmail.com

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## INTRODUCTION

The American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (DSM) is a classification of mental disorders with associated criteria designed to facilitate more reliable diagnoses of these disorders (Mourad Ali, 2018). Intellectual disability (intellectual developmental disorder) is seen as a disorder with onset during the developmental period that includes both intellectual and adaptive functioning deficits in conceptual, social, and practical domains (American Psychiatric Association, 2013).

There has been considerable controversy regarding the name of the disorder "Intellectual Disability." In DSM-IV, this disorder was called "Mental Retardation" to reflect the below-average intellectual ability of individuals with this condition. However, the developers of DSM-5 agreed to abandon this term because of its negative connotation.

## DIAGNOSTIC CRITERIA IN DSM-5

To be diagnosed with ID, a person needs to fulfil the following criteria (American Psychiatric Association 2013):

- A. Deficits in intellectual functions, such as reasoning, problem solving, planning, abstract thinking, judgment, academic learning, and learning from experience, confirmed by both clinical assessment and individualized, standardized intelligence testing.
  - B. Deficits in adaptive functioning that result in failure to meet developmental and sociocultural standards for personal independence and social responsibility. Without ongoing support, the adaptive deficits limit functioning in one or more activities of daily life, such as communication, social participation, and independent living, across multiple environments, such as home, school, work, and community.
  - C. Onset of intellectual and adaptive deficits during the developmental period.
- Symptom onset.

## DIAGNOSTIC FEATURES

In comparison to an individual's age-, gender-, and socio-culturally matched peers, individuals with

intellectual disability show deficits in general mental abilities (Criterion A), and impairment in everyday adaptive functioning (Criterion B). Onset occurs during the developmental period (Criterion C).

Intellectual functions (Criterion A) involve reasoning, problem solving, planning, abstract thinking, judgment, learning from instruction and experience, and practical understanding. Intellectual functioning is typically measured with individually administered and psychometrically valid, comprehensive, culturally appropriate, psychometrically sound tests of intelligence. IQ scores are normally distributed with a mean of 100 and a standard deviation of 15. IQ scores approximately two standard deviations below the mean (i.e.,  $IQ < 70$ ) can indicate significant deficits in intellectual functioning. The measurement error of most IQ tests is approximately 5 points; consequently, IQ scores between 65 and 75 are recommended as cut-offs in determining intellectual deficits (American Psychiatric Association, 2013).

IQ test scores are approximations of conceptual functioning but may be insufficient to assess reasoning in real-life situations and mastery of practical tasks. For example, a person with an IQ score above 70 may have such severe adaptive behaviour problems in social judgment, social understanding, and other areas of adaptive functioning that the person's actual functioning is comparable to that of individuals with a lower IQ score. Thus, clinical judgment is needed in interpreting the results of IQ tests (American Psychiatric Association, 2013).

The Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association, 2013) identifies three domains of adaptive functioning (Criterion B): conceptual, social, and practical. To be diagnosed with ID, individuals must show impairment in at least one domain. Usually, children with ID experience problems in multiple areas:

*The conceptual (academic) domain* involves competence in memory, language, reading, writing, math reasoning, acquisition of practical knowledge, problem solving, and judgment in novel situations, among others.

*The social domain* involves awareness of others' thoughts, feelings, and experiences; empathy;

interpersonal communication skills; friendship abilities; and social judgment, among others.

*The practical domain* involves learning and self-management across life settings, including personal care, job responsibilities, money management, recreation, self-management of behaviour, and school and work task organization, among others.

In DSM-5 (American Psychiatric Association, 2013; p.33), individuals with intellectual disability are characterized by the presence in significant deficits in “both” intellectual functioning and adaptive behaviour.

To meet diagnostic criteria for intellectual disability, the deficits in adaptive functioning must be directly related to the intellectual impairments described in Criterion A. Intellectual and adaptive deficits are present during childhood or adolescence. That is why Criterion C, states that onset is during the developmental period (Tasse, 2016).

#### PREVALENCE

Intellectual disability has an overall general population prevalence of approximately 1%, and prevalence rates vary by age. Prevalence for severe intellectual disability is approximately 6 per 1,000 (American Psychiatric Association 2013).

#### RISK AND PROGNOSTIC FACTORS

*Genetic and physiological.* Prenatal aetiologies include genetic syndromes (e.g., sequence variations or copy number variants involving one or more genes; chromosomal disorders), inborn errors of metabolism, brain malformations, maternal disease (including placental disease), and environmental influences (e.g., alcohol, other drugs, toxins, teratogens). Perinatal causes include a variety of labour and delivery-related events leading to neonatal encephalopathy. Postnatal causes include hypoxic ischemic injury, traumatic brain injury, infections, demyelinating disorders, seizure disorders (e.g., infantile spasms), severe and chronic social deprivation, and toxic metabolic syndromes and intoxications (e.g., lead, mercury)(American Psychiatric Association, 2013).

#### APA’S SEVERITY CODES

The degrees of intellectual disability include mild, moderate, and severe and profound intellectual disability. The APA’s severity codes include:

*Mild intellectual disability* includes about 85 percent of people with intellectual disabilities. Individuals at this level often become self-supportive, as they have the ability to adapt to social norms. Many individuals within this group can achieve some level of academic success.

*Moderate intellectual disability* includes around 10 percent of the individuals with intellectual disabilities. Individuals at this level can achieve independent employment that involves limited conceptual or social skills. They may require guidance during stressful life situations. Most self-care activities can be performed independently with occasional support.

*Severe intellectual disability* describes 3 to 4 percent of this population. These individuals have minimal communication skills, although they typically can learn a few self-help skills. They can take minimal care of themselves and require complete supervision.

*Profound intellectual disability* describes a very small portion of the persons with intellectual disabilities. Individuals at this level experience little cognitive or motor ability and often require 24-hour care and support.

#### COMORBIDITY

There are some mental, neurodevelopmental, medical, and physical conditions which are frequent in intellectual disability. These are mental disorders, cerebral palsy, and epilepsy. The most common co-occurring mental and neurodevelopmental disorders are attention-deficit/hyperactivity disorder; depressive and bipolar disorders; anxiety disorders; autism spectrum disorder; stereotypic movement disorder (with or without self-injurious behaviour); impulse-control disorders; and major neurocognitive disorder. Individuals with intellectual disability, particularly those with more severe intellectual disability, may also exhibit aggression and disruptive behaviours, including harm of others or property destruction) (American Psychiatric Association, 2013).

## CONCLUSION

Intellectual disability, formerly known as “mental retardation,” (Al Said Abdul Khalik, 2014; Mourad Ali Eissa, 2013; Mourad Ali Eissa & Hesham Habib Al Huseini, 2013) is a disorder with onset during the developmental period. Mental retardation was replaced in federal law with the term “intellectual disability” as a result of President Obama’s signing of Rosa’s Law (2010). A diagnosis of ID requires deficits in both intellectual functioning and abilities, and adaptive function and behaviour, which covers many everyday social and practical skills. Limitations in intellectual functioning, such as academic learning, reasoning, problem solving, judgment and abstract thinking. Limitations in adaptive functioning, such as failing to meet developmentally appropriate levels of independence and responsibility. For example, the individual requires support in areas such as personal care, communication, or independent living at home, school and in the community. The onset of these symptoms was during the developmental period, or before the age of 18 years.

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