



## INTELLECTUAL DISABILITY: CAUSES, CATEGORIZATION AND FEATURES

Wapangnaro Imchen<sup>1</sup>, Dr. K. Somasundaran<sup>2</sup>

Ph.D. Research Scholar, Department of Sociology & Social Work, Annamalai  
University, Annamalainagar, Tamil Nadu, India.

Email: [wapangnaroimchen95@gmail.com](mailto:wapangnaroimchen95@gmail.com)

Associate Professor, Department of Sociology & Social Work, Annamalai University,  
Annamalainagar, Tamil Nadu, India.

Email: [soma.mallan@gmail.com](mailto:soma.mallan@gmail.com)

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### Abstract

The phrase "Intellectual Disability" describes the degree of aspects of mind that particular youngster's exhibit. It is the situation where the cognitive advancement of a youngster's is hindered to the extent that it results in a major handicap in the ability to properly process, problem-solve, and adapt to information received from their environment. The definition, underlying causes, and conceptual understanding of children with intellectual impairments are covered in this overview study. Significant impairments in adaptive and intellectual performance behaviour—expressed as conceptual, social, and practical adaptive skills—are characteristics of intellectual disability. An IQ level under 70 and deficiencies in everyday activities or adaptive behaviour abilities (eating, dressing, communicating, and participating in group activities) are considered signs of an intellectual disability. Intellectually disabled individuals learn slowly and struggle with abstract ideas. The features of people with the intellectual disabilities are also discussed in this work in some detail.

**Keywords:** Intellectual Disability, Causes, Categorization and Features

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### Introduction

Intellectual disability is an abnormality with significant societal repercussions; it has an impact not just on the person with it but also on their family and the wider community. Intellectual disability is a lower cognitive ability that affects how quickly, effectively, and efficiently a person learns, recalls, and applies new information in comparison to the overall population.

People with intellectual impairments have undergone a profound transformation in many facets of life over the past century, including healthcare, employment, education, leisure, and living arrangements (World Health Organization, 2000). Throughout history, it has undergone numerous definitions and renaming's. Intellectual disability has now taken the position of mental retardation in the majority of nations, where it was previously used until the late 20th century. Intellectual Disability has taken its position in Diagnostic and Statistical Manual, Fifth Revision (DSM-V).

As opposed to mental retardation, the term intellectual disability is becoming more prevalent due of the following:

- Reflects the concept of transformation for disabilities as defined by the AAIDD and WHO.
- More closely resembles modern professional approaches that put a focus on functional behaviour and contextual variables.
- Is more respectful to people with disabilities.
- Is more in keeping with terms used international.

With other kids their age who does not have difficulties, intellectually disabled children frequently participate in a variety of activities (such as play, making clay, group dancing, music, and creative art). Due to the fact that quality of life, health, education, work, and enjoyment are all fundamental rights for children with intellectual disabilities, it is imperative that they be treated gently and justice. The variety of emotional and mental requirements experienced by people with intellectual impairments is the same as that of the general population. Knowledge acquisition, memory, and application are all components of intelligence. The ability to relate information to novel contexts is lacking in children with intellectual disabilities; they have difficulty understanding abstract concepts as opposed to concrete ones; they also grow their learning sets more slowly than peers without disabilities. (SHREE , 2016)

### **Intellectual Disability**

A person with intellectual disability is someone who has a markedly decreased capacity to comprehend novel or challenging concepts information, to learn new skills, or cope on one's own (impaired social functioning) – which began before adulthood and can have a long-term impact on the person's development.(Department of Health (United Kingdom), 2001, p.14)

A state of functioning known as intellectual impairment (mental retardation) that starts prior to turning 18 is marked by considerable limits in both intellectual performance and adaptive behaviour. Over past few decades, the concept of intellectual impairment has undergone several revisions in response to shifting social, political, and professional factors as well as changes in how people perceive the disease. The AAIDD's definition of intellectual disability is the one that is most commonly accepted: Cognitive functioning and adaptable behaviour, as shown by conceptual, social, and practical adaptive skills, are both significantly limited in people with intellectual impairments. Prior to turning 18, this handicap first appears. (AAIDD [AAMR], 2002,p.1)

According to the following three standards, a person is deemed to have an intellectual disability:

1. Subpar mental ability includes learning, thinking, problem-solving, and other aspects of general mental capability. IQ testing is one tool used to assess intellectual capacity. An IQ test score between 70 and 75 typically denotes intellectual functioning limitations.
2. Significant gaps occur in two or more categories of adaptive skills: It is the set of theoretical, social, and practical abilities that people learn and use on a daily basis.
  - Conceptual skills - Concepts of money, time, and numbers, as well as literacy and self-direction

- Social skills - The ability to obey laws, adhere to standards, and refrain from being a victim are all important, as are interpersonal abilities, civic duty, and self-worth, credulity, gullibility, naiveté (i.e., wariness), and social problem-solving.
  - Practical Skills - Personal care tasks, work-related skills, healthcare, travel and transportation, timetables and routines, safety, monetary management, and telephone use are all examples of daily life activities.
3. Prior to turning 18, the condition becomes apparent: This ailment is one of several developmental impairments, meaning that it was present prior to turning 18 and that it was operationalized as the developmental period.

### Causes of Intellectual Disability

The majority of people with severe intellectual disabilities - roughly 70% - and those with mild intellectual disabilities - 50% - have a biological or organic basis for their illness. The lower end of the typical IQ distribution may simply be reflected in certain children's cognitive deficiencies. In these situations, how something functions is a result of how environmental and genetic influences interact. Few of the psychosocial issues that have been linked to intellectual functioning include poverty, abuse, neglect, lack of stimulation, and poor parent-child interactions. Finding the root of intellectual disability is a challenging process. There are many different causes of intellectual disability, and frequently the cause is not known. In reality, only around half of all cases of intellectual impairments can be linked to a particular cause. In an effort to identify potential biological reasons of intellectual disability in a person, below presents the factors according to the time of onset: prenatal (occurring before birth), perinatal (occurring around that time of birth), and postnatal (occurring after birth).

(Smith, 2006) (Department of Health (United Kingdom), 2001, p.14)

**Table 1 : Illustrative list of possible Intellectual Disability causes**

Type	Example	Characteristics and Consideration
Chromosomal abnormality	Down Syndrome  Fragile X syndrome	<ul style="list-style-type: none"> <li>➤ Most common chromosomal abnormality</li> <li>➤ Distinctive-physical characteristics</li> <li>➤ Mild to moderate intellectual impairment in general</li> <li>➤ One of the main underlying factors contributing to intellectual disability</li> <li>➤ Predominantly affects males</li> <li>➤ Distinctive physical features</li> <li>➤ Learning characteristics might vary greatly.</li> </ul>
Metabolic Disorders	Phenylketonuria (PKU)	<ul style="list-style-type: none"> <li>➤ Inborn error of metabolism, a recessive trait</li> <li>➤ Dietary intervention initiated shortly after birth prevents</li> </ul>

		occurrence of intellectual disability
Maternal Infections	Rubella (German measles)	<ul style="list-style-type: none"> <li>➤ One of the main underlying factors of multiple impairments in children</li> <li>➤ Exposure during first trimester of pregnancy usually results in severe consequences</li> </ul>
Environmental conditions	Fetal alcohol syndrome	<ul style="list-style-type: none"> <li>➤ One of the main underlying factors of intellectual disability</li> <li>➤ Physical abnormalities along with a mild to moderate intellectual disability</li> </ul>
Gestational disorders	Low birth weight / prematurity	<ul style="list-style-type: none"> <li>➤ Infant at danger for life-threatening issues at birth</li> <li>➤ Potential for sensory and learning issues, as well as major impairments</li> <li>➤ More prevalent in mothers of low-income families, teenage pregnancy and women engaged in substance abuse</li> </ul>
Neonatal complications	Anoxia(oxygen deprivation) Birth trauma Breach presentation Prolonged delivery	<ul style="list-style-type: none"> <li>➤ Complicating circumstances around birth may cause intellectual disability and additional developmental delays</li> </ul>
Infectious and intoxicants	Meningitis  Leading poisoning	<ul style="list-style-type: none"> <li>➤ Viral infection causing damage to the covering of the brain – the meninges</li> <li>➤ May result from typical childhood illness such as chicken pox or mumps</li> <li>➤ Intellectual disability is a distinct possibility</li> <li>➤ High toxic substance</li> <li>➤ Infants/toddlers living in older homes in improvised areas places where ingestion is risky lead- based paint chips</li> <li>➤ Possibility of causing seizures, harm to the central nervous system, and brain damage</li> </ul>
Environmental factors	Malnutrition Environmental deprivation Child abuse / neglect	<ul style="list-style-type: none"> <li>➤ Correlates of intellectual disability, but not necessarily their causes, particularly in cases of moderate intellectual</li> </ul>

		disability ➤ Best understood as interrelated psychosocial risk factors that increase some children's susceptibility to learning difficulties
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Source: R.Garguilo, *Special Education in Contemporary Society*, 3<sup>rd</sup> ed. (Garguilo, 2009)

The possibility that a particular causes cannot be identified increases generally with the severity of the retardation. Even if they share similar etiological reason, no two intellectually disabled students are alike.

### Categorization of Intellectual Disability

Over several decades ago, various classification schemes for kids with intellectual disabilities have been devised. Four levels of impairment severity (mild, moderate, severe, and profound intellectual disability) were used in the 1973 and 1983 AAIDD definitions of intellectual disability. This system of categorization is still widely accepted and used today.

**Table 2: Illustrative level of disability severity for people with intellectual disability**

Level of Intellectual Disability	IQ range	Approximate mental age in adulthood	& of person with Intellectual Disability at this level
Mild	55-69	8years, 3months to 10 years, 9 months	85
Moderate	36-51	5 years, 7 months to 8 years, 2months	10
Severe	20-35	3 years, 2months to 5 years, 6 months	3.5
Profound	<20	<3years, 2months	1.5

Source : (Sattler, 2002, p. 337)

According to the prevailing theory, there are numerous causal elements that contribute to intellectual disability, including genetic predisposition, environmental insults, developmental susceptibility, inheritance, and environment (Harris, 2006). As a result, the AAIDD recommended the subsequent four categories as part of a multifactorial aetiology. ((AAMR), 2002, p. 127).

1. Biomedical: factors relate to biological processes, such as genetic disorders or nutrition.
2. Social: factors relate to social and family interaction, such as stimulation and adult responsiveness.
3. Behavioural: factors link to potentially causative behaviours, including as risky (harmful) activities or maternal substance addiction.

4. Educational: factors linked to the accessibility of educational resources that facilitate the growth of cognitive and adaptive skills.

The classification system used by AAIDD is based on the kind and amount of assistance needed by the individual in order to operate in the home and community. AAIDD advises four tiers of assistance:

**Table 3 : Illustrative Level Based on Needed Support**

Support Level	Descriptive with Examples
Intermittent	On a "as needed basis," supports are given. These aid may be sporadic, meaning that the person does not constantly require it, or short-term, taking place during life transitions (e.g., job loss or acute medical crisis). There are many levels of intensity for intermittent assistance.
Limited	Consistency is a feature of supports; while the time needed may be brief, the need is constant. In comparison to more extensive levels of assistance (examples include time-limited employment training and supports during the transition from school to adulthood), fewer staff members may be needed, and expenses may be cheaper.
Extensive	Regular participation (daily, for example) in some places, like the workplace or home, distinguishes supports from other types of assistance. Supports are also not time-limited (long-term employment and home-living assistance, for example, will be required).
Pervasive	Consistent and powerful supports are required. They must be offered in a variety of conditions and might even be life-sustaining. Compared to intensive or time-limited interventions, ubiquitous supports often include more workers and are more obtrusive.

Source : Adapted from *Mental Retardation : Definition, Classification and Systems of supports, 10<sup>th</sup> ed.* ((AAMR), p. 152).

### Features of Intellectual Disability

The following sub-headings present features of people with intellectual disabilities that may affect their academic learning and the capacity to adapt to their circumstances at home, school, and in the community:

➤ **General Cognition**

People with intellectual disabilities range widely in terms of their physical characteristics, emotional states, and views. They may appear to learn slowly because of their delayed rate of cerebral growth. (Wehman, 1997). Learning can occur at an adequate rate and volume for persons with intellectual disabilities when they focus on the right parts of the learning stimuli rather than the wrong parts. (Vakil, 1997) (Werts, 1996). An intellectually disabled person's general cognition—their capacity and comfort in learning—is more likely to depend on the kinds and amounts of support they receive to perform at a certain level or at a given task. This is not to say that an IQ test result is irrelevant. (Hourcade, 2002).

➤ **Learning and Memory**

Individuals with intellectual disabilities possess much worse learning and memory skills than their non-disabled peers. People with intellectual disabilities acquire their learning sets more slowly than their peers who are not disabled, and they struggle to apply knowledge to novel contexts. (Bernie-Smith, J.R, & S, 2006). Intellectually disabled children may struggle to recognise the circumstances or behaviours that promote learning and memory, and they may not apply appropriate learning or memory retention strategies on their own. (Fletcher, 2003).

➤ **Attention**

Children must focus on the learning activity for the necessary amount of time and manage distractions in order to learn knowledge. Intellectually disabled children may struggle to recognise and pay attention to pertinent concerns in both academic and social contexts. (Sauders, 2001). The challenge is not that the student won't pay attention, but rather that they do not comprehend or do not filter the material to find the important details. (Hunt, 2002)

➤ **Adaptive Skills**

Intellectually disabled people frequently lack the same adaptive qualities as their peers who are not disabled. Due to their increased distractibility, inattentiveness, inability to read and impulsive behaviour, intellectually disabled children may find it challenging to learn new skills as well as apply them. (Hardman, 2008). Children who are not disabled did see their peers with intellectual impairments as friends, according to research on the level of social relationships between minor intellectually disabled children and peers without disabilities. (Lee, 2003)

➤ **Self – Regulation**

According to information-processing theory, the under-development of metacognitive processes is what causes the learning deficits in intellectually disabled individuals. Memory, rehearsal abilities, organising skills, and the ability to direct the learning process are all significantly impacted by the absence or underdevelopment of these capabilities. (Erez, 2001)

➤ **Speech and Language**

Language comprehension and formulation issues, as well as delayed speech, are common among people with intellectual disabilities. Language issues typically include delayed language development rather than strange language use. (Bernie-Smith, J.R, & S, 2006). The ability to take turns, choose appropriate conversational topics, know when to speak and when to be silent, and other similar contextual skills may be delayed in persons with intellectual disabilities. (Haring, 1994). The aetiology and severity of intellectual disabilities are strongly connected with the severity of

speech and language issues; less severe the intellectual disabilities, the lesser severe language issues are. (Moore - Brown, 2006)

➤ **Motivation**

People with intellectual disabilities sometimes characterised as lacking motivation or acting in an outwardly focused manner. They may come off as less motivated and goal-directed due to previous failures and the worry those failures caused. Failure frequently teaches us helplessness. Failure in the past is likely to cause dependence on outside reinforcement or reward sources rather than internal reward sources. They are less likely to be independent individuals driven by self-approval. (Bernie - Smith, 2002)

➤ **Academic Achievement**

Intellectual disabilities that are mild to moderate in children frequently struggle academically due to their cognitive inefficiencies. (Hughes, 2002). Children with intellectual disabilities are able to understand simple calculations, but they might struggle to apply principles correctly in a circumstance when they need to solve a problem. (Bernie-Smith, J.R, & S, 2006). There is growing evidence that mild to severe intellectual disabilities in children can learn academic subjects and use them to increase their orientation and mobility, participate in social situations, and make decisions. (Browder, 2006)

➤ **Physical Characteristics**

Intellectually disabled children that have a variety of biological causes may also have coexisting issues like physical, motor, orthopaedic, visual, auditory, and health issues. (Hallahan, 2006). There is a correlation between a person's degree of physical deviations and their intellectual difficulties. (Drew, 2007)

## Conclusion

Being a social animal, humans should treat intellectual disability in a comprehensive and all-inclusive manner. To face potential challenges, they require inspiration and assistance. The argument that using the word "intellectual disability" would be less stigmatising is not supported by research. The issue is in society, not with the particular person. The ridiculing of the language is probably a result of the preconceptions and stereotypes that people have while thinking about people with intellectual disabilities. Stigma is a multifaceted, psychological issue rather than a problem with words per se. Significant cognitive and adaptive behaviour impairment is a hallmark of intellectual disability. Loss effects of those with intellectual disabilities and those who are usually developing. However, because to their communicative and cognitive needs, this demographic requires special consideration. Due to subsequent loss, communication difficulties, and difficulty or incapacity to find meaning in the loss, intellectually disabled people are more likely to experience the traumatic grief symptoms.

## References

- (AAMR), A. A. (2002). *Mental Retardation : definition, classification amd systems of supports*. Washington, DC:Author.
- (n.d.). *AAIDD [AAMR], 2002,p.1*.
- Bernie - Smith, M. (2002). *Mental Retardation* (6 ed.). Upper Seaddle River,NJ : Merrill.
- Bernie-Smith, M., J.R, P., & S, K. (2006). *Mental Retardation*. upper Saddle River, NJ : Pearson Education.



- Browder, D.-D.-L. (2006). *Introduction to students with severe disabilities* (6 ed.). Upper Saddle River, NJ: Merrill/Prentice Hall .
- (n.d.). *Department of Health (United Kingdom), 2001, p.14.* united kingdom.
- Drew, C. (2007). *Mental Retardation : A life cycle approach* (9 ed.). Upper Saddle River, NJ : Pearson Education.
- Erez, G. (2001). Cognition and metacognition : Evidence of higher thinking in problem solving of adolescents with mental retardation. *Educational and Training in Mental Retardation and Developmental Disabilities* . 83-93.
- Fletcher, K. (2003). Effects of verbal and physical prompts on external strategy use in children with and without mild mental retardation. *American Journal on Mental Retardation*, 108,245-256.
- Gargiulo, R. (2009). *Special Education in Contemporary Society, 3rd ed.* Thousand Oaks, CA : Sage,2009.
- Hallahan, D. (2006). *Exceptional Learners : Introduction to special education* (10 ed.). Boston : Houghton & Bacon.
- Hardman, M. E. (2008). *Human exceptionality : School, Community and Family.* Boston : Houghton Mifflin Company.
- Haring, N. (1994). *Exceptional Children and Youth : An introduction to special education* (6 ed.). Upper Saddle River, NJ : Merrill / Prentice Hall.
- Harris, J. (2006). *Intellectual Disability : Understanding its development, causes, classification, evaluation and treatment.* New York: Oxford university press.
- Hourcade, J. (2002). *Mental retardation: update 2002.* Arlington, VA: ERIC.
- Hughes, C. (2002). *Using self-monitoring to improve performance in general education high school classes.* *Educational and Training in Mental Retardation and Developmental Disabilities.*
- Hunt, N. (2002). *Exceptional children and youth : An introduction to special education.* Boston : Houghton Mifflin.
- Lee, S. (2003). Characteristics of friendship among children with and without mild disabilities *Educational and Training in Developmental Disabilities.* 157-166.
- Moore - Brown, B. (2006). *Making a difference for America's children : Speech Language pathologists in public schools.* Eau Claire, WI : Thinking Publications.
- Sattler, J. (. (2002). *Assessment of children: Behavioural and clinical application (4th ed).* San Diego, CA : Jerome M. Sattler.
- Sauders, M. (2001). *Who's getting the message ? Teaching Exceptional Children.*
- SHREE , A. (2016). Intellectual Disability: definition, classification,. *Learning Community-An International Journal of Educational and Social Development.*
- Smith, M. B. (2006). *Mental retardation : an introduction to intellectual disabilities.* Pearson Merrill Prentice Hall, upper saddle river.
- Vakil, E. S.-R. (1997). Procedural and declarative memory processes : Individuals with and without mental retardation. *American Journal on Mental Retardation*, 102, 147-160.

Wehman, P. (1997). Exceptional individuals in school, community and work. *Austin, TX:PRO-ED.*

Werts, M. (1996). Sneak in some extra learning by using instructive feedback.