

## **THE STUDY OF FUNCTIONAL ABILITIES AND PROBLEMATIC BEHAVIOUR AMONG ADULT WITH ID**

**Suman Madan**

Assistant Professor in Special Education

**Savita**

Special Educator

---

### **ABSTRACT**

The present study titled “The Study of Functional Abilities and Problematic Behaviour among Adults with Intellectual Disabilities (ID)” aimed to compare functional abilities and problematic behaviours between male and female adults with ID and to examine the correlation between these two variables. A sample of 40 adults (20 males and 20 females) with ID from special schools in the Rohtak district was assessed using the **BASAL MR** tool. Statistical analysis revealed no significant gender differences in functional abilities or problematic behaviours, indicating that both males and females showed similar performance levels. However, a negative correlation was found between functional abilities and problematic behaviours for both genders, suggesting that higher functional abilities are associated with fewer behavioural problems. This relationship was stronger among females, highlighting the importance of developing functional skills to reduce problematic behaviours and promote greater independence in adults with intellectual disabilities.

**Keywords:** Intellectual Disability, Functional Abilities, Problematic Behaviour, Gender Differences, BASAL MR, Correlation, Adults with ID.

### **INTRODUCTION**

Individuals with intellectual disabilities (ID) experience challenges in cognitive functioning and adaptive behaviour, which impact their daily living, communication, and social skills. These challenges can vary widely depending on the severity of the disability, environmental factors, and available support systems. Intellectual disabilities can affect an individual's ability to reason, problem-solve, plan, think abstractly, and learn from experience. Difficulties in adaptive behavior manifest in limitations in conceptual, social, and practical skills necessary for everyday functioning.

The functional abilities and problematic behavior among adults with ID is essential for understanding their unique needs, enhancing support systems, and improving their quality of life. Research in this area helps identify key factors that contribute to successful community integration, social inclusion, and independent living. Moreover, examining the extent of functional impairments and their relation to problematic behaviors allows for the development of personalized interventions and policies aimed at fostering autonomy and well-being.

### **CONCEPT OF INTELLECTUAL DISABILITY**

Intellectual Disability (ID) is a neuro-developmental disorder that involves significant impairments in cognitive functioning and adaptive behavior. It affects an individual's ability to understand, learn, and apply knowledge in daily life. These limitations manifest in conceptual, social, and practical skills, influencing personal independence and social responsibility.

## **ADULTS WITH INTELLECTUAL DISABILITY**

Adults with ID face unique challenges and opportunities as they transition from childhood to adulthood. While some individuals achieve a degree of independence, others require continuous support in multiple aspects of daily life. Key areas of concern for adults with ID include:

1. Education and Vocational Training
2. Employment and Workplace Inclusion
3. Independent and Supported Living
4. Healthcare and Well-being
5. Social Relationships and Community Participation
6. Legal and Financial Support
7. Aging with Intellectual Disability

Addressing the needs of adults with ID through comprehensive support services, inclusive policies, and community involvement is essential for promoting their independence and improving their overall quality of life.

## **FUNCTIONAL ABILITIES**

Functional abilities refer to the daily living skills and adaptive behaviors that enable an individual to perform everyday tasks independently. In individuals with Intellectual Disabilities (ID), these abilities may be delayed or impaired, requiring structured support and intervention. Functional abilities are essential for maintaining personal care, social interactions, and independent living. These skills help individuals integrate into society and lead productive lives to the best of their potential.

### **Differences in Functional Abilities Between Males and Females with Intellectual Disabilities (ID)**

Intellectual disability affects both males and females; however, research suggests that gender influences various aspects of functional abilities, including self-care, social skills, vocational skills, mobility, and behavioral patterns. These differences may be due to biological, social, cultural, and environmental factors.

#### **1. Self-Care and Daily Living Skills:**

- **Females with ID** tend to develop better self-care and hygiene routines. They are more likely to be aware of personal cleanliness and grooming habits, such as bathing, brushing teeth, and dressing appropriately.
- **Males with ID** often require more structured and repeated training in personal hygiene, grooming, and dressing appropriately. They may show lower motivation for maintaining cleanliness.
- **Household Management Skills:** Females with ID are often encouraged to participate in household tasks like cooking, cleaning, and organizing belongings, whereas males may require more training in these areas.
- **Health and Menstrual Management:** Females with ID require additional support in managing menstruation, understanding reproductive health, and maintaining hygiene.

## 2. Social and Emotional Skills:

- **Communication & Social Interaction:** Females with ID typically develop better verbal communication skills and are more likely to engage in social conversations. They tend to express their emotions more openly and seek social connections.
- **Males with ID** may struggle with emotional expression, often showing more impulsivity or difficulty in understanding social cues.
- **Empathy and Relationships:** Females with ID are often more empathetic and nurturing in social relationships, while males may struggle with interpersonal sensitivity.
- **Emotional Regulation:** Males with ID are more prone to impulsive reactions and may require additional support in self-regulation strategies.
- **Risk of Exploitation:** Females with ID are at higher risk of social vulnerability, including exploitation and abuse, making social skill training crucial.

## 3. Vocational and Work-Related Skills:

- **Career Expectations & Opportunities:** Males with ID are often encouraged toward physical, technical, or labor-intensive jobs (e.g., carpentry, mechanics, agriculture).
- **Females with ID** are more likely to be trained in care-giving, hospitality, or administrative roles due to societal expectations.
- **Workplace Adaptability:** Females tend to be more adaptable to structured environments and repetitive tasks, while males may require more guidance in workplace etiquette and cooperation.
- **Financial Literacy:** Males with ID often receive more training in financial independence, while females may have limited exposure to financial management due to protective family attitudes.

## 4. Mobility and Independence:

- **Outdoor Activities & Physical Mobility:** Males with ID are more encouraged to participate in outdoor activities, sports, and independent commuting.
- **Females with ID** may face mobility restrictions due to safety concerns, cultural norms, and over protectiveness from caregivers.
- **Public Safety Awareness:** Due to social vulnerabilities, females with ID may require extra training on personal safety, recognizing dangerous situations, and responding appropriately in public.
- **Transportation Skills:** Males with ID are more likely to be trained in using public transport independently, while females often require more structured supervision.

## 5. Behavioral Differences:

- **Aggression & Hyperactivity:** Males with ID are more prone to externalizing behaviors such as aggression, hyperactivity, defiance, or disruptive behavior.
- **Anxiety & Withdrawal:** Females with ID often exhibit more internalizing behaviors such as anxiety, depression, or social withdrawal.
- **Risk-Taking Behavior:** Males with ID may be more likely to engage in risk-taking behaviors, while females often exhibit cautiousness and reliance on others.

- **Coping Mechanisms:** Females are more likely to develop coping mechanisms like avoidance, while males may respond with frustration or aggression.

## 6. Educational and Cognitive Development

- **Learning Styles:** Research indicates that females with ID may have better memory retention in verbal learning tasks, whereas males may perform better in visual-spatial tasks.
- **Interest in Academic & Vocational Training:** Males with ID may show higher interest in hands-on learning activities, while females may prefer structured, teacher-led instruction.
- **Classroom Behavior:** Males with ID may exhibit more classroom disruptions, while females are more likely to remain passive or quiet.
- **Special Education Support:** Males with ID tend to receive earlier diagnosis and intervention compared to females, who may be overlooked due to less disruptive behaviors.

## 7. Health and Well-being:

- **Physical Health Differences:** Males with ID have a higher prevalence of co-morbid conditions such as ADHD and autism spectrum disorder (ASD), whereas females with ID are more likely to have mood disorders.
- **Nutritional Habits:** Males with ID may have poor eating habits, whereas females with ID may be more likely to follow structured meal plans.
- **Sleep Patterns:** Males with ID are more likely to have sleep disturbances and restlessness, while females may experience anxiety-related sleep difficulties.
- **Sexual Health Awareness:** Females with ID require specialized guidance on reproductive health, consent, and personal safety, while males may require education on appropriate social and sexual behaviors.

## 8. Support Needs and Care-giving Approaches:

- **Family and Caregiver Expectations:** Families often expect males with ID to achieve greater independence, while females are perceived as requiring more protection.
- **Behavioral Interventions:** Males with ID benefit from behavior modification strategies that address hyperactivity and aggression, while females may need interventions for anxiety and social withdrawal.
- **Training Programs:** Special education and rehabilitation programs should incorporate gender-specific strategies to address unique developmental needs.

## Assessment of Functional Abilities in ID

Assessing functional abilities helps in determining the level of support needed and designing appropriate interventions. Standardized tools used for assessment include:

1. **Vineland Adaptive Behavior Scales (VABS):** Measures communication, daily living, and socialization skills.
2. **Adaptive Behavior Assessment System (ABAS):** Evaluates a range of adaptive skills across conceptual, social, and practical domains.

3. **BASAL MR (Behavioral Assessment Scales for Adult Living-Mental Retardation):** Used to assess individuals' functional abilities in daily activities and identify areas requiring support.
4. **Independent Living Skills Checklist:** Determines the ability to live semi-independently by evaluating self-care, domestic responsibilities, and community functioning.
5. **Supports Intensity Scale (SIS):** Measures the level of support required across multiple life domains, including employment, social activities, and personal care.

## PROBLEMATIC BEHAVIOUR

Problematic behavior in individuals with Intellectual Disabilities (ID) refers to persistent, disruptive, or maladaptive behaviors that interfere with daily functioning, learning, and social interactions. These behaviors are more common among individuals with ID due to cognitive limitations, difficulty in communication, and challenges in emotional regulation.

### Common Problematic Behaviors in Individuals with ID

1. **Aggression**
2. **Self-Injurious Behavior (SIB)**
3. **Tantrums and Emotional Outbursts**
4. **Noncompliance**
5. **Stereotypic Behaviors**
6. **Social Withdrawal**
7. **Destructive Behavior**
8. **Hyperactivity and Impulsivity**

### Causes of Problematic Behavior in Individuals with ID

1. **Communication Difficulties** – Inability to express needs or emotions effectively.
2. **Sensory Sensitivities** – Over reaction or under reaction to sensory stimuli (light, sound, textures).
3. **Emotional Regulation Challenges** – Difficulty in managing frustration, anxiety, or fear.
4. **Environmental Factors** – Lack of structure, stressful surroundings, or inconsistent routines.
5. **Social and Adaptive Skill Deficits** – Struggles with understanding social norms or expected behaviors.
6. **Health-Related Issues** – Pain, discomfort, or medical conditions that affect behavior.

### Impact of Problematic Behavior on Functional Abilities of Adults with Intellectual Disabilities (ID)

Problematic behavior in adults with Intellectual Disabilities (ID) significantly affects their ability to function independently in daily life. These behaviors, including aggression, self-injury, hyperactivity, withdrawal, and non-compliance, can hinder their personal, social, vocational, and community participation. The severity and frequency of these behaviors, the

level of intellectual impairment, and the availability of supportive interventions determine their overall impact.

### **1. Impact on Self-Care and Daily Living Skills**

- Hygiene and Grooming
- Feeding and Nutrition
- Dressing and Self-Maintenance

**Example:** An adult with ID who frequently experiences tantrums may refuse to bathe or brush their teeth, leading to hygiene issues that can result in social rejection or health concerns.

### **2. Impact on Social and Communication Skills**

- Difficulty in Building Relationships
- Lack of Social Boundaries
- Limited Verbal Communication

**Example:** An individual with ID who frequently shouts or hits others during social interactions may be excluded from community programs or friendships, further limiting opportunities for social engagement.

### **3. Impact on Vocational and Work-Related Abilities**

- Reduced Employment Opportunities
- Lower Productivity
- Workplace Safety Issues

**Example:** An adult with ID working in a bakery may struggle to follow hygiene protocols due to impulsive behavior, affecting their ability to retain the job.

### **4. Impact on Mobility and Community Participation**

- Difficulty in Navigating Public Spaces
- Safety Risks
- Restricted Independence

**Example:** A person with ID prone to wandering or aggressive outbursts may be restricted from using public transport independently, limiting their ability to work or engage in social activities.

### **5. Impact on Behavioral and Emotional Well-being:**

- Increased Stress and Anxiety
- Low Self-Esteem:
- Cycle of Dependence:

**Example:** An adult with ID who experiences frequent emotional breakdowns may avoid social interactions, leading to further isolation and reduced functional abilities.

### **6. Impact on Family and Caregiver Support**

- Increased Caregiver Burden



- Financial Strain
- Social Stigma

**Example:** A family avoids taking their adult child with ID to social gatherings due to frequent aggressive episodes, leading to isolation for both the individual and their caregivers.

### Strategies to Reduce the Impact of Problematic Behavior

- Behavioral Therapy
- Social and Communication Training
- Vocational and Independent Living Training
- Caregiver Training and Support

Problematic behaviors in adults with ID significantly impact their functional abilities, limiting independence, social inclusion, and vocational opportunities. Addressing these behaviors through structured interventions, therapy, and community-based support can enhance their quality of life and promote greater self-sufficiency. By implementing appropriate behavior management strategies, individuals with ID can develop adaptive skills, improve social relationships, and achieve a greater level of independence.

### Objectives:-

1. To compare the functional abilities of ID adult boys with ID adult girls.
2. To compare the problematic behaviour of ID adult boys with ID adult girls.
3. To find out correlation between functional abilities and problematic behaviour of ID adult boys.
4. To find out correlation between functional abilities and problematic behaviour of ID adult girls.

### Sample:-

1. In this study, adult students with Intellectual Disabilities from the Arpan Institute for mentally Handicapped Children School, Phoolwari (A School for Hearing Impaired & Learning Disabled Children), KVM Special School, Chetanalaya Vishesh Gurukul school in Rohtak district will be included. There will be 40 students in which 20 boys and 20 girls are there.

### Data Sample table

**Table 1: Boys sample:**

SNo.	Name	Age
1	Anmol	21
2	Deepak	29
3	Arun Deswal	30
4	Vinod	33
5	Anil	31
6	Jitesh	26

**Table 2: Girls sample:**

SNo.	Name	Age
1	Saniya	18
2	Kirtika	19
3	Mehak	19
4	Chetna	23
5	Anita	28
6	Isha Khalsa	36

7	Ishant	19		7	Manisha	28
8	Partik	20		8	Asha	25
9	Rohit	31		9	Megha Sharma	28
10	Ajay	25		10	Madhu	32
11	Manish	26		11	Harpreet	51
12	Meethu	29		12	Taniya	18
13	Deepanshu	29		13	Anuradha	18
14	Shalender	26		14	Sonam	19
15	Gagan	32		15	Navya	19
16	Sudhir	26		16	Anshu	19
17	Aakash	21		17	Dimple	19
18	Hariom	19		18	Muskan	21
19	Deepanshu	18		19	Komal	21
20	Dhruv	20		20	Sarika	19

#### **Tool:- BASAL MR**

The **BASAL MR** (Mental Retardation) tool is a standardized assessment instrument specifically designed to evaluate functional abilities and problematic behaviors in individuals with ID and design by **Dr. Reeta Peshawaria, D.K Menon, Rahul Ganguly and Ch. Rajshekhar.**

#### **SCORING:**

##### **BASAL- MR (Part A)**

Each item should be scored based on the 6 levels of performance i.e.,

Independent	=	5
Clueing/ Modeling	=	4
Verbal prompting	=	3
Physical prompting	=	2
Totally dependent	=	1
Not applicable	=	0

##### **BASAL- MR (Part B)**

Each item should be scored based on the three levels of frequency of problem behavior i.e.,

Never	=	0
Occasionally	=	1
Frequently	=	2



### Statistical Analysis

**Table 3:** Boys score in functional abilities and Problematic behaviour.

Sr.No.	Name	TOTAL SCORE(FUNCTIONAL ABILITIES)	TOTAL SCORE(PROBLEMATIC BEHAVIOUR)
1	ANMOL	352	15
2	DEEPAK	227	43
3	ARUN DESWAL	579	14
4	VINOD	308	25
5	ANIL	370	37
6	JITESH	289	24
7	ISHANT	288	27
8	PARTIK	303	65
9	ROHIT	261	33
10	AJAY	316	25
11	MANISH	318	25
12	MEETHU	289	24
13	DEEPANSHU	262	32
14	SHALENDER	272	26
15	GAGAN	335	12
16	SUDHIR	354	24
17	AAKASH	274	38
18	HARIOM	378	21
19	DEEPANSHU	343	32
20	DHRUV	186	55

**Table 4:** Girls score in functional abilities and Problematic behaviour.

SR. NO.	NAME	TOTAL SCORE(FUNCTIONAL ABILITIES)	TOTAL SCORE(PROBLEMATIC BEHAVIOUR)
1	SANIYA	329	43
2	KIRTIKA	498	12
3	MEHAK	332	31
4	CHETNA	266	31
5	ANITA	289	34
6	ISHA KHASA	316	16
7	MANISHA	272	36
8	ASHA	343	28
9	MEGHA SHARMA	266	36
10	MADHU	273	34
11	HARPREET	194	61
12	TANIYA	206	41

13	ANURADHA	254	32
14	SONAM	390	31
15	NAVYA	334	29
16	ANSHU	217	30
17	DIMPLE	418	31
18	MUSKAN	485	14
19	KOMAL	316	36
20	SARIKA	331	34

**Table 5: Comparision male and female**

S No.	Domains	Gender	N	Mean	Standard Deviation	T- Value
1	Functional	Male	20	313.26	80.02	-0.09232458
		Female	20	315.78	84.73	
2	Problematic Behaviour	Male	20	30.63	12.93	-0.1991014
		Female	20	31.42	10.51	

The table presents a comparative analysis of functional abilities and problematic behaviour among male and female adults with Intellectual Disabilities (ID). For the domain of functional abilities, the mean score for males (N = 20) was 313.26 with a standard deviation of 80.02, while females (N = 20) had a slightly higher mean score of 315.78 with a standard deviation of 84.73. The calculated t-value for this comparison was -0.0923, indicating no statistically significant difference between males and females in terms of functional abilities.

Similarly, in the domain of problematic behaviour, males scored a mean of 30.63 with a standard deviation of 12.93, whereas females had a mean score of 31.42 with a standard deviation of 10.51. The t-value obtained for this comparison was -0.1991, which again shows no significant gender-based difference in problematic behaviour. These results suggest that gender does not play a significant role in influencing either functional abilities or problematic behaviours among adults with Intellectual Disabilities within this sample group.

#### **CORRELATION MALE AND FEMALE BETWEEN FUNCTIONAL ABILITIES AND PROBLEMATIC BEHAVIOUR**

S No.	Gender	Domains	Mean	Standard Deviation	Correlation
1	Male	Functional	313.26	80.02	-0.522245263
		Problematic Behaviour	30.63	12.93	
2	Female	Functional	315.78	84.73	-0.736314297
		Problematic Behaviour	31.42	10.51	

The table illustrates the correlation between functional abilities and problematic behaviour among male and female adults with Intellectual Disabilities (ID). For each gender group, the mean scores, standard deviations, and correlation coefficients are provided across the two domains.

Among **males**, the mean score for functional abilities was **313.26** with a standard deviation of **80.02**, while the mean score for problematic behaviour was **30.63** with a standard deviation of **12.93**. The **correlation coefficient** between functional abilities and problematic behaviour for males was **-0.5222**, indicating a **moderate negative correlation**. This suggests that as functional abilities increase, problematic behaviours tend to decrease among male adults with ID.

For **females**, the mean score for functional abilities was **315.78** with a standard deviation of **84.73**, and for problematic behaviour, the mean was **31.42** with a standard deviation of **10.51**. The **correlation coefficient** for females was **-0.7363**, which reflects a **strong negative correlation** between functional abilities and problematic behaviour. This implies that higher levels of functional abilities are more strongly associated with lower levels of problematic behaviour among female adults with ID compared to males.

In summary, the data reveals that in both genders, there is a negative relationship between functional abilities and problematic behaviour, with this association being stronger in females. This finding highlights the importance of enhancing functional abilities as a potential means of reducing problematic behaviours, particularly among women with Intellectual Disabilities.

## DISCUSSION

In this study, we compared the functional abilities and problematic behavior between males and females with intellectual disabilities. The results showed that both males and females had similar levels of functional abilities, with only small differences in their average scores. The spread of scores (standard deviation) was also similar for both groups, meaning there was a similar level of variation within each gender group.

When looking at problematic behavior, the average scores for males and females were almost the same, but there was a bit more variation in the male group. However, there were no significant differences between the genders in terms of problematic behavior.

In terms of the relationship between functional abilities and problematic behavior, both males and females showed a negative correlation, meaning that as functional abilities improved, problematic behavior decreased. However, the negative correlation was stronger in females, suggesting that functional abilities and problematic behavior are more closely related for females than for males.

Overall, the study suggests that while gender doesn't have a major impact on functional abilities or problematic behavior, the connection between these two factors seems to be stronger for females. This could help in developing better support strategies for both males and females.

## REFERENCES

1. Peshawaria, R., Menon, D. K., Ganguly, R., & Rajshekhar, C. (1989). BASAL-MR: A Basic Skill Assessment Tool for Mental Retardation. Secunderabad: NIMH.
2. Emerson, E. (2001). Challenging behaviour: Analysis and intervention in people with severe intellectual disabilities. Cambridge University Press.
3. Hodapp, R. M., et al. (2001). The relationship between challenging behaviors and adaptive functioning in individuals with intellectual disabilities. *American Journal on Mental Retardation*, 106(5), 434-444.

4. American Association on Intellectual and Developmental Disabilities. (2010). Intellectual Disability: Definition, Classification, and Systems of Supports.
5. Schalock, R. L., Borthwick-Duffy, S. A., Bradley, V. J., Buntinx, W. H., Coulter, D. L., Craig, E. M., & Yeager, M. H. (2010). Intellectual Disability: Definition, Classification, and Systems of Supports. American Association on Intellectual and Developmental Disabilities.
6. Schalock, R. L., Borthwick-Duffy, S. A., & Haimowitz, M. (2010). Intellectual disability: Definition, classification, and systems of supports. American Journal on Intellectual and Developmental Disabilities, 115(3), 184–193.
7. Tassé, M. J., Schalock, R. L., Balboni, G., Bersani Jr, H., Borthwick-Duffy, S. A., Spreat, S., ... & Zhang, D. (2012). The construct of adaptive behavior: Its conceptualization, measurement, and use in the field of intellectual disability. American Journal on Intellectual and Developmental Disabilities, 117(4), 291–303. <https://doi.org/10.1352/1944-7558-117.4.291>
8. Ferguson, J., & Smith, R. (2013). The development of functional skills in individuals with intellectual disabilities: Implications for educational and behavioral interventions. Journal of Intellectual & Developmental Disability, 38(4), 318–329. <https://doi.org/10.3109/13668250.2013.833888>
9. Fletcher, R. J., et al. (2016). Environmental factors influencing the functional abilities of adults with intellectual disabilities. Journal of Applied Research in Intellectual Disabilities, 29(4), 291-303.
10. Kim, H., & Park, E. Y. (2017). The relation between the behavior problems and motor skills of students with intellectual disability. Journal of Exercise Rehabilitation, 13(1), 14–23. <https://doi.org/10.12965/jer.1732828.083>
11. Gaur, M., & Dhenwa, B. L. (2024). Delineating gender disparities in cognitive abilities and social functioning among children with intellectual disabilities. Kayani University Education Journal (KUEY), 2(1), 37–45.