

## Emotional Behavioral Problems & Intelligence Quotient among Children with Intellectual Disabilities: Exploring Correlation

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**Abstract:** The perspective of our own world build upon positive mental health of our growing community. However, approximately one in every five children and adolescents has emotional and behavioral disorders at some period of time in their young lives, irrespective of their geographic region or socio-economic status. Behavioral problems among children can be comprised of normal development. Such problems are usually fugitive and not even noticed and may be exhibited in certain circumstances and not in others. It is being seen all around the world how early detection of behavioral and emotional issues has an impact. There has, however, only been a limited amount of systematic study of childhood psychological disorders in developing nations.

The present investigation aimed to investigate the Emotional Behavioral Problems & Intelligence Quotient among Children with Intellectual Disabilities: Exploring Correlation. Descriptive survey method has been used in this research and the sample for the present study were 50 parents of children with intellectual disability studying and 12 teachers working at Govt. Rehabilitation Institute for Intellectual Disabilities (GRIID). For the present study Developmental Behavior Checklist (DBC) DBC-P and DBC-T will be used. The result of the study suggests that there is significant correlation between IQ, Age, Gender and Emotional Behavioral Problems among Children with Intellectual Disabilities based on the score obtained through observation from teachers and parents.

**Keywords:** Emotional Behavior, Intellectual Disability, Intelligence Quotient

### Introduction

The seeds of the bright future society are in the children of the present day. Given that young children make up a significant amount of the world's population – between 35 and 45 percent- it is imperative that we place more of an emphasis on them in the modern world. The psychological health of our younger generations is critical to the future of our nation. Nevertheless, nearly one in five children and adolescents have emotional and behavioral disorders at some point of time in their early lives, irrespective of their geographic region or socio-economic

status.

Behavioral problems in children can be considered as a phase of normal development. Such problems are generally transient and none can be bothered of and may be presented in certain settings and not in others. Some school children shown a variety of abnormal behaviors that may be an issue not only for parents and families, but also for teachers and persons in the community. Globally, people are beginning to realize how important early identification is for emotional and behavioral issues. The comprehensive study of pediatric psychological disorders

ers in developing nations has, however, not received much attention up to this point.

### **Behavior Problem**

The term "Behavior Problem" is used here in a broad sense. Any type of persisting problems which may hamper the successful adjustment of the children can be considered as a behavior problem. Parents and teachers usually come across several types of behavior problems in children. In Wickman's (1928) study which was conducted in America, it was found

that teachers and mental hygiene experts disagreed to some extent regarding the seriousness of different types of behavior problems. Inattention, carelessness, laziness and

disobedience was considered as the most serious problems by teachers. The least serious problems according to them included thumb sucking, suspiciousness and sensitiveness.

### **Emotional Behavior Problem:**

A person's capacity to be joyful, manage their emotions, and pay attention during class is all impacted by an emotional behavioral issue. Gallaudet University includes the following as signs of an emotional behavioral issue:

- Inappropriate behavior or emotions as compared to the situation's norm.
- Learning challenges that are not a result of another health problem.
- Interpersonal interactions, particularly those who have professors and peers, are difficult for the learner.

### **Emotional Behavioral Disorders and Their Types:**

**Oppositional Defiant Disorders (ODD):** According to Children's Mental Health Ontario, ODD is a behavior disorder which is characterized by aggressive, agitated, and uncooperative attitudes in children.

**Anxiety:** Everyone experiences anxiety at some time during their lives. It is a common feeling. However, for other people, anxiety can become so severe that it starts to disrupt their everyday activities, which leads to sleeplessness and impairs their performance at work or school.

**Obsessive-Compulsive Disorder (OCD):** OCD is defined by worries and unreasonable thoughts that develop into obsessions and then compulsive behaviors.

### **Problems of Emotional Behavior Children:**

Emotionally disturbed children are sometimes known as problem children. Depending upon the type of problems exhibited such children are classified into three categories such as:

#### **1. Children with Conduct Problems:**

**Behavior traits:** Disobedience, disruptiveness, fighting, destructiveness, temper, tantrums, irresponsibility, impertinent, jealous, anger, bossy profanity.

**Life history characteristics:** Assaultive, defies authority, inadequate guilt feelings and quarrelsome

#### **2. Children with Personality Problems:**

**Behavior traits:** Feeling of inferiority, self-consciousness, social withdrawal, anxiety, crying, hypersensitive, seldom smiles, depression.

**Life history characteristics:** Shy sensitive, worries, timid and has anxiety over own behavior.

#### **3. Children with inadequacy-immaturity problems.**

**Behavior Traits:** Preoccupation, short attention, span, clumsiness, passivity, day dreaming, chews objects.

**Life History characteristics:** Habitually truant from home, unable to cope with a complex word, incompetent, immature, and engages in furtive stealing.

### **Intellectual Disability**

Intellectual Disability is a condition in which individuals have difficulty to adapt and cope with various environments in which they have themselves.

The normal intellectual growth of intellectual disabled individual is affected before birth, during birth process or in the early years of development. Developmental milestones are delayed for these children and they cannot learn like a normal child. They face the difficulty in fulfilling their daily needs because of impaired ability to learn and getting challenges for scoring a job for themselves. Furthermore, finds it difficult to become socially acceptable.

**American Association on Mental Retardation (1983)** gave a comprehensive definition as mentioned. "The term "mental retardation" (MR) refers to considerably below average general intellectual performance that manifests during the developmental stage and is either linked to or results in concurrent deficiencies in adaptive behavior."

### **Intelligence**

One's ability for logic, comprehension, self-awareness, learning, emotionality, reasoning, planning, creativity, and problem-solving are just a few examples of the different components that make up intelligence. It is more accurately characterized as the capacity for seeing or inferring knowledge and then retaining it to use for internal adaptive activities.

### **Intelligence Quotient**

An individual's overall score on a variety of standardized test scores used to evaluate intellect is known as their "intelligence quotient" (IQ). The mental age score obtained from an intelligence test is divided by the person's chronological age, which is also stated in years and months, to determine the person's IQ score. The IQ score is calculated by multiplying the resultant fraction by 100. Although historically this was not always the case, the median raw score of the norming sample was classified as IQ 100 when the current IQ tests were designed, and scores each standard deviation (SD) up or down were defined as 15 IQ points more or fewer. Nearly two-thirds of people fall into this definition's range of IQs, which is between 85 and 115. About 2.5% of the participants have scores over 130 and 2.5% have scores below 70.

The evaluation of intellectual impairment, employment in school, and screening of job candidates all depend on IQ tests. The cognitive abilities of students, such as memory, attention and speed may not become better while improving their scores on standardized tests.

### **Need and Significance of the Study**

As we have seen, students with intellectual disability and emotional behavioral problems and intelligence quotient always make trouble for themselves, their parents, and school. According to literature, no research has explained the Emotional Behavioral Problems and Intelligence Quotient among Children with Intellectual Disabilities. Because of the poor economic and cultural conditions most of families of children with intellectual disability and their inability to use costly treatment these kinds of studies can be great help to this group.

In this regard, this research aimed to investigate the Emotional Behavioral Problems & Intelligence Quotient among Children with Intellectual Disabilities. The findings of this research will be useful for specialists, planners, teachers, and parents.

### **Statement of the Problem**

Emotional Behavioral Problems & Intelligence Quotient among Children with Intellectual Disabilities: Exploring Correlation

### **Objective**

The purpose of this study is to explore the correlation between emotional behavioural problems and intelligence quotient among children with intellectual disabilities.

### **Scope of the Study:**

The present research is limited in nature but has some distinct scope for the children with intellectual disability, special educators, Parents and the administrators. Following could be the scope of the present research:

- The finding of the present research throws lights on how to identify children with intellectual disability.
- The present research is an outcome of Psychologists, Parents and Teachers.
- This study will also establish the relationship between and intelligence and emotional behavioural problems.

### **Delimitation of the Study:**

- The study is limited to children with intellectual disability only.
- The present study is confined to only with sample (N=50).
- The study is limited to the Government Rehabilitation Institute for Intellectual Disabilities Sector 31-C, Chandigarh.

### **REVIEW OF LITERATURE**

Tong (2010) examined the gender differences in the interaction between intelligence and developmental problems along with social competence in first class children. The results interpreted that the understanding ability of boys essentially correlated with their fellow relationship. Other side, the emotional symptoms shown by girls had a more correlation with their intellectual abilities. The connection between parenting and intellectual abilities varies in boys and girls. Children's gender is important factor when assessing the diversity in their intellectual abilities and developmental problems. Furthermore, the style of parenting also affects the development of children in different ways.

Forster (2011) proposed that there are significant differences among persons with severe and profound ID in scores on the DBC, showing differences in

n behavioral and emotional problems. Attention should be given by researchers treating these two diverse groups as a single group, and by practitioners transmission such results into practice.

Rao & Raju (2012) did a study on early adolescence: emotional and behavioral problem. The study's goal was to look into the emotional and behavioral issues that early adolescents who were enrolled in high schools were experiencing, as well as to determine the association between these issues and demographic factors including class, gender, medium, and kind of school. The result indicated that 10<sup>th</sup> class students showed emotional and behavioral problems. Further, boys showed emotional problems as compared to girls. It was seen that private school also reflect emotional and behavioral problems. But emotion problems were found in Government school adolescents. A firm relationship has been formed between emotional and behavioral problems among adolescents. The outcome of this study recommended for result psychological testing and implications in high schools through purposefulness training.

### **Hypothesis:**

There will be no significant difference in correlation between emotional behavioral problems and intelligence quotient among children with intellectual disabilities.

## **METHODOLOGY**

### **Sample and Sampling Technique**

The sample for the present study were 50 parents of children with intellectual disability studying and 12 teachers working at Govt. Rehabilitation Institute for Intellectual Disabilities (GRIID), Chandigarh.

### **Following were the inclusion criteria:**

- Willingness of the Subject, Parents and Teachers to participate in present study.
- Only those who are studying at Government Rehabilitation Institute for Intellectual Disabilities Sector 31-C, Chandigarh.
- Gender: Male and female

### **Following were the exclusion criteria:**

- Those students who are above 18 years of age.
- Those students who are not pursuing in Government Rehabilitation Institute for Inte

lectual Disabilities Sector 31-C, Chandigarh.

### **Research Design:**

The present study is descriptive research under survey. The main purpose of that study is to bring a precise description of a situation. Survey is a brief discussion or interview of individual about a specific topic. The following step is to design the research once the research project has been precisely specified. A comprehensive set of instructions for gathering data is provided by the research design.

### **Tool:**

For collection of data for any research, the use of appropriate and standardized tool is very important. For the present study Developmental Behavior Checklist (DBC) DBC-P and DBC-T will be used. DBC tool is developed by Stewart L. Einfield and Bruce J. Tonge & published by Developmental Psychiatry and Psychology Monash University, Australia in 1994.

### **Procedure:**

With the prior permission of concerned authority, subjects (P=50, T=12) were randomly selected with age group 4-18 yrs. IQ of the subjects were tested by the clinical psychologist, after that tool (DBC-T and DBC-P) were given to teachers and parents to obtain their observation on based on DBC-T and DBC-P respectively about the selected subjects. Instructions were written on the tool and it was also given verbally by the researcher to the participants and enough time was provided to the sample to complete the tool. After the completion of the tool the samples were thanked for their cooperation by the investigator. Each participant received the tool and were instructed how to go about, they oriented about the ratings given to each option available and then were requested to complete it to the best of their observation and experience. The participants were made clear about the aims and objective of the present study. It was made clear to the participants that their identity will be kept confidential and the data collected will be used for the purpose of this study.

### **Results and Discussions**

Data analysis is the procedure of doing interpretations of the collected data and arriving at conclusions.

ion of the study. It is very important aspect because on the result we get after an important role. se conclusion of the study can be drawn basically

**Interpretation of Results obtained after Statistical Analysis**

**Table: Descriptive analysis (Mean and SD) of Teachers and Parents Responses towards TBPS among CWID**

Variables	Teacher’s Mean± Std. Deviation	Parents ‘Mean± Std. Deviation
Variables	Mean± SD	Mean± SD
IQ	53.72±11.45	-
Age	10.92±3.5	-
Disruptive	17.88±7.63	17±8.11
Self-absorbed	19.66±10.23	19.52±9.05
Communication	12.16±4.83	9.08±5.46
Anxiety	13.18±5.34	11.02±7.71
Social-Relating	14.24±6.14	9.84±5.71
*TBPS	77.12±25.79	66.46±29.18

**\*Total Behaviour Problem Score**

Depict the comparison of mean score and SD of emotional behavioral problems and intelligence quotient. While analyzing the score of IQ the mean score and SD of teacher and parents were 53.72 and 11.45 respectively. The mean and SD score obtained on age of teachers and parents were 10.92 and 3.5 respectively.

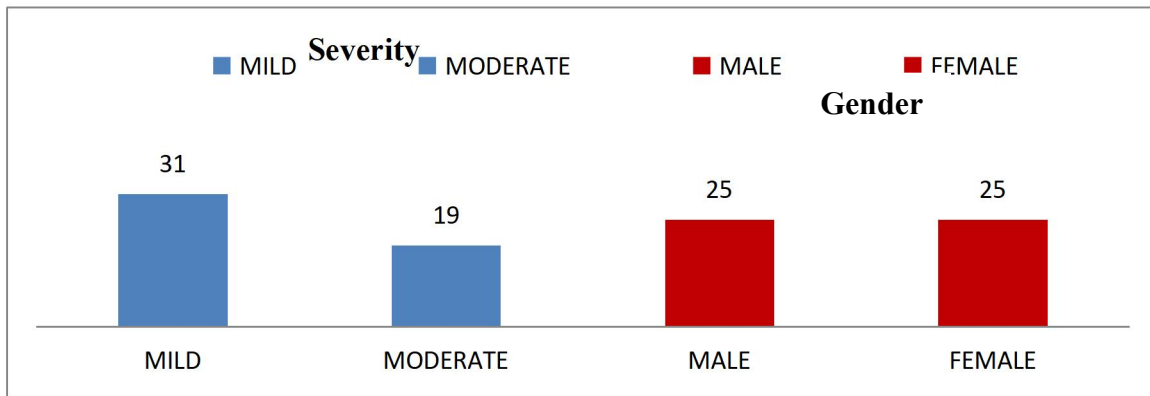
The analysis of disruptive the mean score of parents was 17.88 and SD 7.63 while teachers mean and SD were 17 and 8.11 respectively. Similarly, the comparison of self-absorbed the mean score a

nd SD of parents were 19.66±10.23 and teachers were 19.52±9.05. While comparing of communication the mean score and SD of parents were 12.16±4.83 and teachers were 9.08±5.46. While analyzing the score of anxiety the mean score and SD of parents were 13.18±5.34 and teachers were 11.02±7.71. The analysis of social relating shows the mean score and SD of parents were 14.24±6.14 and teachers were 9.84±5.71. The comparison of TBPS, the mean score and SD of parents were 77.12±25.79 and teachers were 66.46±29.18.

**Details of Demographic Variables**

Variables	Categories	Frequency	Percent
Severity	Mild	31	62.0
	Moderate	19	38.0
Gender	Male	25	50.0
	Female	25	50.0

**Graphical representation of demographic variable (severity and gender) of individuals with intellectual disability**



The above table represents the frequency distribution of the respondents for IQ category of children. The total number of the respondents is 50, out of which 62% of the respondents are from mild and 38% from moderate category. Figure 2 exhibits the pie chart of the frequency of the respondents for IQ category. The total number of the respondents is 50, out of which 50% of the respondents are from male and 50% from female category. Figure 1 exhibits

the pie chart of the frequency of the respondents for gender category.

### Results and Discussion

#### Hypothesis 1:

There will be no correlation between emotional behavioral problems and intelligence quotient among children with intellectual disability based on the scores obtained from teachers.

**Table 4.3 Results of emotional behavioral of children with intellectual disability based on the scores obtained from teachers**

Variables	Gender	Age	Disrupt-privet	Self-absorbed	Commu-nication	Anxiety	Social-Relating	TBPS
IQ	.395**	-.342*	-.390**	-.516**	-.116	-.589**	-.387**	-.521**
	.005	.015	.005	.000	.424	.000	.006	.000
Age		-.092	-.223	-.333*	.031	-.500**	-.271	-.345*
		.523	.120	.018	.829	.000	.057	.014
Gender			.553**	.308*	.385**	.527**	.319*	.523**
			.000	.030	.006	.000	.024	.000
Disruptive				.615**	.657**	.499**	.508**	.823**
				.000	.000	.000	.000	.000
Self-absorbed					.489**	.658**	.630**	.870**
					.000	.000	.000	.000
Communication						.297*	.476**	.693**
						.036	.000	.000
Anxiety							.725**	.804**
							.000	.000
Social-Relating								.813**
								.000

\* Significant at the 0.05 level, \*\* Significant at the 0.01 level

Depicts correlation between IQ and emotional behavioral problem based on the scores obtained from

teachers. The table indicates that the scores of IQ is correlated with Gender, Age and Domains (Disruptive, Self-Absorbed, Anxiety, Social Relating and TBPS) of emotional behavioral problems and the p-values were .395\*\* (p<0.01), .342\* (p<0.05), .390\*\* (p<0.01), .516\*\* (p<0.01), .589\*\* (p<0.01), .387\*\* (p<0.01) and .521\*\* (p<0.01) respectively. The domain where no correlation found was communication.16 (p>0.05).

When the data was correlated with Age and domains of Emotional behavioral problems it was only correlated with the three of its domains i.e. Self-Absorbed, Anxiety and TBPS) and the p-values were .333\* (p<0.05), .500\*\* (p<0.01), .345\* (p<0.05), respectively. The domain where no correlation found was Disruptive .223 (p>0.05), Communication .031 (p>0.05), Social Relating. 271 (p>0.05). However, significant correlation was found between Age and the Total Problem Behavior Score .345\* (p<0.05).

The data was also analyzed with reference to gender to find out the correlation. A significant correlation was found between Gender and the Emotional behavioral of children with intellectual disability based on the scores obtained from the teachers. The domain wise analysis shows that Disruptive, Self-Absorbed, Communication, Anxiety and Social Relating was significantly correlated with gender, the

scores were .553\*\* (p<0.01), .308\* (p<0.05), .385\*\* (p<0.01), .527\*\* (p<0.01), .319\* (p<0.05).

The overall TBPS was also correlated with gender .523\*\* (p<0.01). Hence the null hypothesis is partially accepted.

The positive and significant correlation indicated that IQ, Age and Gender are almost moving in the same direction. It means that the IQ, Age and Gender have greater influence on the emotional behavioral problems of children with intellectual disability based on the scores obtained from the teachers. This finding is corroborated by a research by Molteno (2001) in which 355 intellectually disabled children enrolled in special schools in Cape Town, South Africa, were evaluated using the Developmental Behavioral Checklist—Teacher Version (DBC-T). In comparison to children in the mild and moderate categories, those with severe and profound ID had more behavioral issues. Selfishness and autistic traits were the main behavioral issues among kids with severe intellectual disabilities.

**Hypothesis 2:**

There will be no correlation between emotional behavioral problems and intelligence quotient among children with intellectual disability based on the scores obtained from parents.

**Results of emotional behavior of children with intellectual disability based on the scores obtained from parents**

Variables	Gender	Age	Disruptive	Self-absorbed	Communication	Anxiety	Social-Relating	TPBS
IQ	<b>-.342*</b>	<b>.395**</b>	<b>-.491**</b>	<b>-.363**</b>	-.030	<b>-.411**</b>	<b>-.356*</b>	<b>-.465**</b>
	<b>.015</b>	<b>.005</b>	<b>.000</b>	<b>.010</b>	.837	<b>.003</b>	<b>.011</b>	<b>.001</b>
Gender		-.092	<b>.302*</b>	.259	.117	<b>.352*</b>	<b>.388**</b>	<b>.379**</b>
		.523	<b>.033</b>	.070	.418	<b>.012</b>	<b>.005</b>	<b>.007</b>
Age			-.224	-.142	-.209	<b>-.282*</b>	<b>-.484**</b>	<b>-.336*</b>
			.117	.325	.145	<b>.047</b>	<b>.000</b>	<b>.017</b>
Disruptive				<b>.850**</b>	<b>.299*</b>	<b>.360*</b>	<b>.454**</b>	<b>.872**</b>
				<b>.000</b>	<b>.035</b>	<b>.010</b>	<b>.001</b>	<b>.000</b>
Self-absorbed					<b>.465**</b>	<b>.343*</b>	<b>.363**</b>	<b>.893**</b>
					<b>.001</b>	<b>.015</b>	<b>.010</b>	<b>.000</b>
communication						.140	.264	<b>.552**</b>
						.334	.064	<b>.000</b>
anxiety							<b>.519**</b>	<b>.599**</b>
							<b>.000</b>	<b>.000</b>

Social-Relating									.673**
									.000

\* Significant at the 0.05 level, \*\* Significant at the 0.01 level

**Table 4.4** depicts correlation between IQ and emotional behavioral problem based on the scores obtained from parents. The table indicates that the scores of IQ is correlated with Gender, Age and Domains (Disruptive, Self-Absorbed, Anxiety, Social Relating and TBPS) of emotional behavioral problems and the p-values were .342\*\* (p<0.01), .395\* (p<0.05), .491\*\* (p<0.01), .363\*\* (p<0.01), .411\*\* (p<0.01), .356\* (p<0.05) and .465\*\* (p<0.01) respectively. The domain where no correlation found was communication .030 (p>0.05).

The data was also analyzed with reference to gender to find out the correlation. A significant correlation was found between Gender and the Emotional behavioral of children with intellectual disability based on the scores obtained from the teachers. The domain wise analysis shows that Disruptive, Anxiety and Social Relating was significantly correlated with gender, the scores were .302\* (p<0.05), .352\* (p<0.05), .388\*\* (p<0.01). The domain where no correlation found were Age and domain (Self Absorbed, Communication) .092 (p>0.05), .259 (p>0.05), .117 (p>0.05)

The overall TBPS was also correlated with gender .379\*\* (p<0.01). Hence the null hypothesis is partially accepted.

When the data was correlated with age and domains of Emotional behavioral problems it was only correlated with the two of its domains i.e. Anxiety, Social Relating and TPBS) and the p-values were .282\* (p<0.05), .484\*\* (p<0.01), .336\* (p<0.05), respectively. The domain where no correlation found was Disruptive .224 (p>0.05), Self-Absorbed .142 (p>0.05), Communication .209 (p>0.05).

The positive and significant correlation indicated that IQ, Age and Gender are almost moving in the same direction. It means that the IQ, Age and Gender have greater influence on the emotional behavioral problems of children with intellectual disability based on the scores obtained from the parents. The research by Cormack (2000), which found that 50.4% of the children had DBC scores over the threshold for a mental condition, lends credence to this finding. The level of the child's physical handicap was significantly influenced by the parents' as

assessments of his or her behavioral and emotional issues.

### Conclusion

Feeling of a child and his behavior are influenced by outlook, culture, relationships, health, fatigue, and family situations, experiences of early childhood care and education and dimension of other factors. So the opportunity for social integration and later employment is reduced. The objective of this study was to analyze the correlation between emotional behavioral problems and intelligence quotient among children with intellectual disabilities. The outcome of the study suggests that there is significant correlation between IQ, Age, Gender and Emotional Behavioral Problems among Children with Intellectual Disabilities based on the score obtained through observation from teachers and parents.

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