



# Virtual autism and its impact on child's brain development

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## ABSTRACT

The current study has been undertaken to assess knowledge score regarding Virtual autism and its impact on child's brain development among mothers of school going children in Gwalior, M.P. The research design used for study was descriptive in nature. The tool for study was self-structured questionnaire which consists of 3 parts- PART- I consisted questions related to Socio-demographic data, PART-II Checklist for practice and PART-II consisted of self -structured knowledge questionnaire to assess knowledge score regarding Virtual autism and its impact on child's brain development among mothers of school going children. The data was analyzed by using descriptive & inferential statistical methods. The self-structured knowledge questionnaires consisted of 20 questions. For maximum 1 mark was given, the score was further graded as poor (0-5), average (6-10), good (11-15) and excellent (16-20) In assessment stage, 6 (20.0%) mothers of school going children were having poor knowledge score while 24 (80.0%) were having average knowledge score, each 0 (0.0%) mothers of school going children were having good and excellent knowledge score. The knowledge score was  $7.10 \pm 2.40$ .

**Keyword-** Knowledge, Virtual autism and its impact on child's brain development.

## I. Introduction

Virtual autism is termed as a situation which happens when young children spend excessive time with the screen. With research it has come to fore that the children suffering with autism express abnormal social communication skills and similar behaviour again and again. Spending more hours with screens, gives birth to lesser brain function and challenging behaviour. It is assumed that most of the games and apps we use in our gadgets are so developed especially for children, resulting into giving rise to preponderance in the children below four years of age. In comparison to older days, at present children are more exposed with the gadgets in routine life. Researches have also shown that it causes imbalance in neurotransmitters, resulting into abnormal behaviour; personality development; and difficulty in conversation.

The limit of screen time as fixed by the experts is more than one hour or two in a day. Over and above the prescribed limit results into affecting the development of brain, behaviour related disorders like late response and interaction. For various kinds of developments in a toddler like speech and language is very important. Children learn by observing various things in their surroundings and if the same is available in the form of electronic media the same would lead to development related issues. The parents should pay attention towards the child and observe their activities mainly when they are spending time with the screen, in absence of the same there would be possibility of this kind of syndrome in the child. Children should be given opportunity to get themselves involved in physical activities in the early childhood which would help them to build their physical and mental development.

## II. Objective of the study

1. To assess the knowledge score regarding Virtual autism and its impact on child's brain development among mothers of school going children.
2. To find out the association between knowledge score regarding Virtual autism and its impact on child's brain development among mothers of school going children with their selected demographic variables.

## III. Need for the study

1. Curtailing the time of children with screen and involve in other activities may reduce the ill effects of the disease.
2. A child is not prompt in reacting with sensations and often do not respond to all sensations and only react to a specific or particular activity and delay in responding makes the problem more complicated.
3. Emotions are very important for every child for development in all respect and the same can be given easily.
4. The parents who are in job and are not able to spend time and pay attention on their wards are required to be more cautious

#### IV. Hypotheses:

1. H0 - There will be no significant association between knowledge score regarding Virtual autism and its impact on child's brain development among mothers of school going children with their selected demographic variables
2. H1 – There will be a significant association between knowledge score regarding Virtual autism and its impact on child's brain development among mothers of school going children with their selected demographic variables.

#### V. Assumption

1. Mothers of school going children may have deficit knowledge regarding Virtual autism and its impact on child's brain development.

#### V. Methodology

An evaluative approach was used and descriptive research design was used for the study. The samples consisted of 30 mothers of school going children selected by Non probability convenient sampling technique. The setting for the study was selected area of Gwalior, M.P.. Data was gathered with help of demographic variables, check list & administering a self-structured knowledge questionnaire. Data were analysis using descriptive & inferential statistics.

#### VI. Analysis and interpretation

##### 6.1 Section- A Frequency and percentage distribution of selected samples.

The present section comprises of selected demographic variables with their tabular and graphic representation which involves the interpretation of data in term of frequency and percentage distribution. The present section also concerned with data pertaining to the baseline information such as age, sex, educational status, economical level of mothers of school going children.

Table No. 6.1.1

Frequency and percentage distribution of mothers of school going children according to age

S. No.	Demographic Variable	No.	Percentage
1.	<b>Age</b>		
	a. 21-25 years	0	0.0
	b. 26-30 years	1	3.3
	c. 31-35 years	18	30.0
	d. Above 36 years	11	36.7

There were 0 (0.0%) mothers of school going children in the age group 21-25 years, 1 (3.3%) people were in the age group 26-30 years, 18 (30.0%) mothers of school going children were in the age group 31-35 years, while 11 (36.7%) mothers of school going children were in the age group above 36 years.

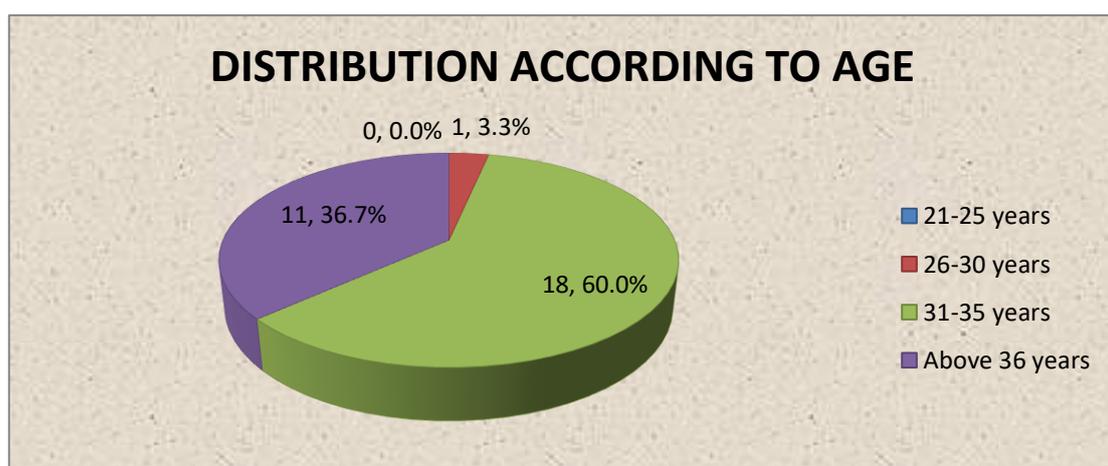
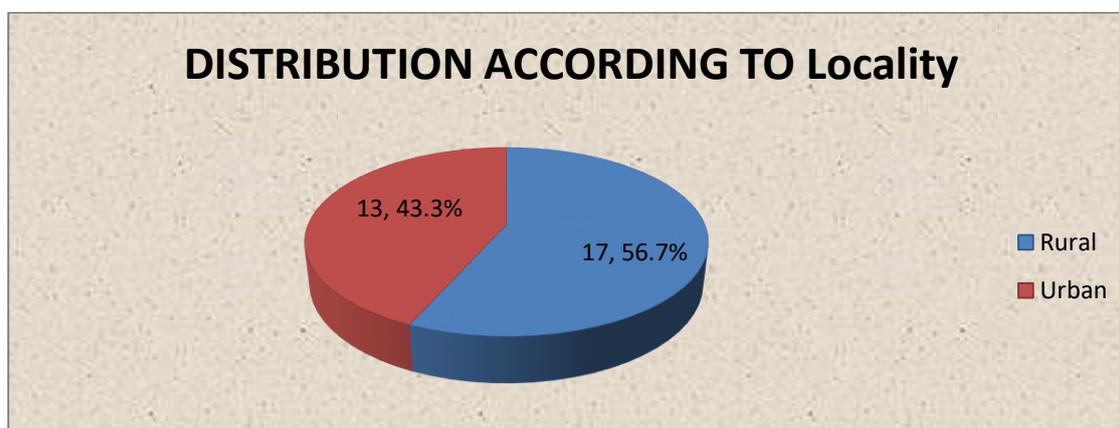


Fig. 6.1.1: Pie diagram showing distribution according to age

**Table No. 6.1.2**  
**Frequency and percentage distribution of mothers of school going children according to locality**

S. No.	Demographic Variable	No.	Percentage
2.	<b>Locality</b>		
	a. Rural	17	56.7
	b. Urban	13	43.3

There were 17 (56.7%) mothers of school going children were residing in rural area and 13 (43.3%) mothers of school going children were residing in urban area in the present study.

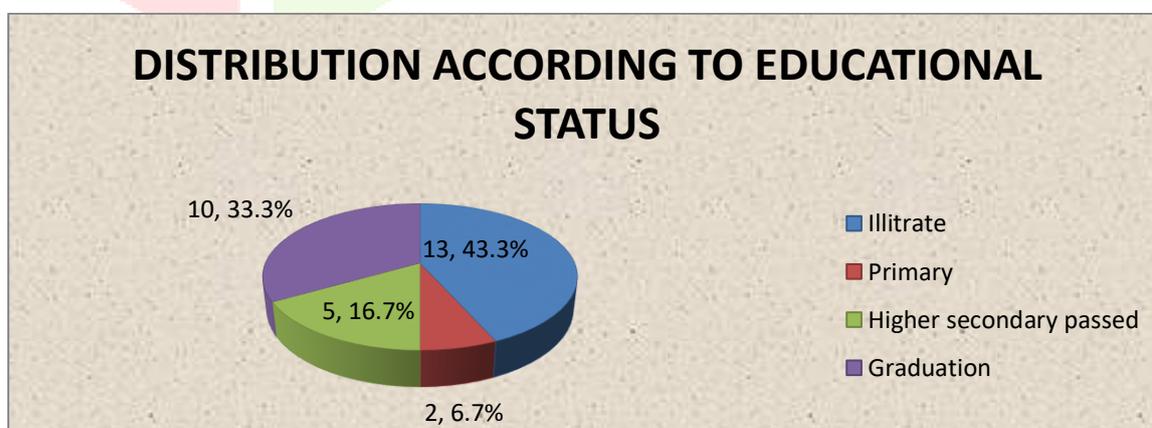


*Fig. 6.1.2: Pie diagram showing distribution according to Locality*

**Table No. 6.1.3**  
**Frequency and percentage distribution of mothers of school going children according to educational status.**

S. No.	Demographic Variable	No.	Percentage
3.	<b>Educational status</b>		
	a. Illiterate	13	43.3
	b. Primary	2	6.7
	c. Higher secondary passed	5	16.7
	d. Graduation	10	33.3

In this study mothers of school going children of 13 (43.3%) adolescent found to be illiterate, 2 (6.7%) adolescents had primary level of education, 5 (16.7%) mothers of school going children had higher level of education, while 10 (33.3%) mothers of school going children found to be graduate.

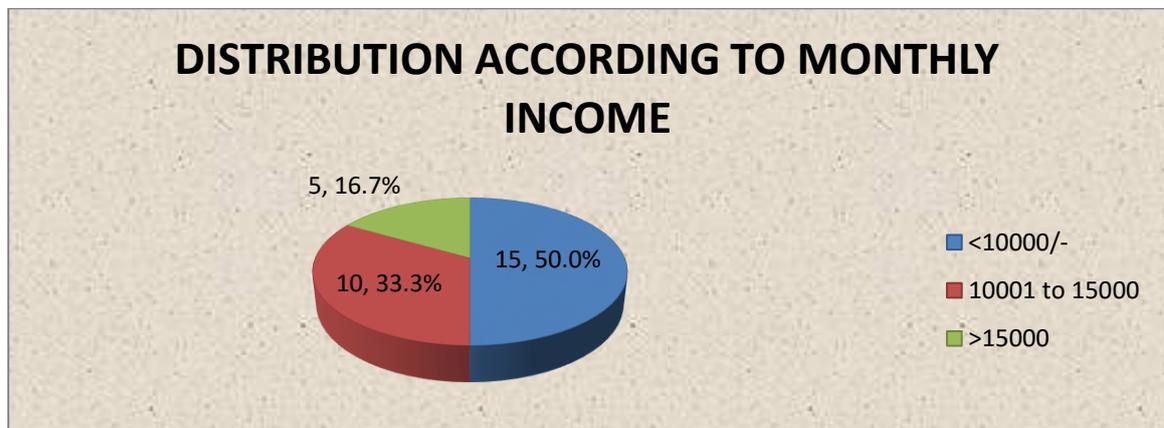


*Fig. 6.1.3: Pie diagram showing distribution according to educational status.*

**Table No. 6.1.4**  
**Frequency and percentage distribution of mothers of school going children according to Monthly income.**

S. No.	Demographic Variable	No.	Percentage
4.	<b>Diet</b>		
	a. <10000	15	50.0
	b. 10001-15000	10	33.3
	c. >15000	5	16.7

In this study Monthly income of 15 (50.0%) mothers of school going children found to be <10000, Monthly income of 10 (33.3%) mothers of school going children found to be 10000 to 15000/-, while Monthly income of 5 (16.7%) mothers of school going children found to be >15000.



**Fig. 6.1.4:** Pie diagram showing distribution according to monthly income.

## 6.2 Section- B knowledge score grade among the mothers of school going children.

**Table No. 6.2.1**

### Knowledge score grades

S. No.	Knowledge score grades	At Assessment stage	
		No.	%
1.	Poor (0-5)	6	20.0
2.	Average (6-10)	24	80.0
3.	Good (11-15)	0	0.0
4.	Excellent (16-20)	0	0.0
	Total	30	100.0

The above table shows the knowledge score of mothers of school going children. The self-structured knowledge questionnaires consisted of 20 questions. For maximum 1 mark was given, the score was further graded as poor (0-5), average (6-10), good (11-15) and excellent (16-20) In assessment stage, 6 (20.0%) mothers of school going children were having poor knowledge score while 24 (80.0%) were having average knowledge score, each 0 (0.0%) mothers of school going children were having good and excellent knowledge score.

## 6.3 Section- B knowledge score among the mothers of school going children.

**Table No. 6.3.1**  
**knowledge score**

S. No.	Score	Mean $\pm$ SD
1.	Knowledge score	7.10 $\pm$ 2.40

The above table shows the knowledge score regarding Virtual autism and its impact on child's brain development among mothers of school going children. The knowledge score was 7.10  $\pm$  2.40.

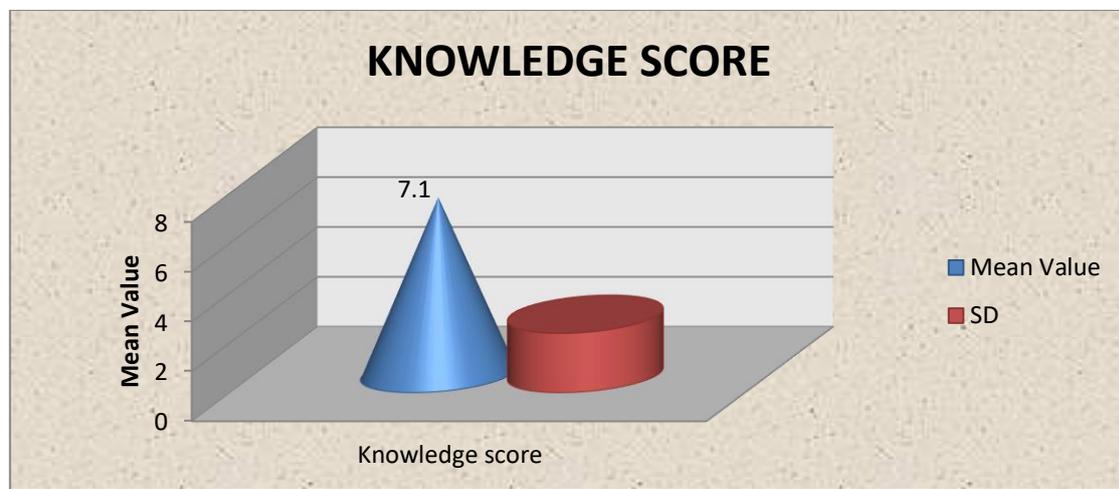


Fig. 6.3.1: Bar diagram showing knowledge score among mothers of school going children

#### 6.4 Section- D Association between knowledge score among the mothers of school going children with their selected demographic variables.

Table- 6.4.1 Association of age with pre-test scores:

Age (in years)	Test scores			Total
	POOR (0-5)	AVERAGE (6-10)	GOOD (11-15)	
21-25	0	0	0	0
26-30	0	1	0	1
31-35	3	15	0	18
Above 36	3	8	0	11
<b>Total</b>	<b>6</b>	<b>24</b>	<b>0</b>	<b>30</b>
X=0.73      p>0.05(Insignificant)				

The association of age test scores is shown in present table 3.1. The probability value for Chi-Square test is 0.72 for 2 degrees of freedom which indicated a insignificant valve ( $p>0.05$ ). Hence, it is identified that there is a insignificant association between age and test scores. Moreover, it is reflected that age isn't influenced with the present problem.

Table- 6.4.2 Association of locality with pre-test scores:

Sex	Test scores			Total
	POOR (0-5)	AVERAGE (6-10)	GOOD (11-15)	
Rural	4	13	0	17
Urban	2	11	0	13
<b>Total</b>	<b>6</b>	<b>24</b>	<b>0</b>	<b>30</b>
X=0.30      p>0.05(Insignificant)				

The association of locality and test scores is shown in present table 3.1. The probability value for Chi-Square test is 0.30 for 1 degrees of freedom which indicated a insignificant valve ( $p>0.05$ ). Hence, it is identified that there is a insignificant association between locality and test scores. Moreover, it is reflected that locality isn't influenced with the present problem.

Table- 6.4.3 Association of educational status with pre-test scores:

Educational status	Test scores			Total
	POOR (0-5)	AVERAGE (6-10)	GOOD (11-15)	
Illiterate	1	12	0	13
Primary	1	1	0	2
Higher secondary	1	4	0	5
Graduation	3	7	0	10
<b>Total</b>	<b>6</b>	<b>24</b>	<b>0</b>	<b>30</b>
X=2.98      p>0.05(Insignificant)				

The association of educational status and test scores is shown in present table 3.1. The probability value for Chi-Square test is 2.98 for 3 degrees of freedom which indicated a insignificant valve ( $p>0.05$ ). Hence, it is identified that there is a insignificant association between educational status and test scores. Moreover, it is reflected that educational status isn't influenced with the present problem.

**Table- 6.4.4 Association of monthly income with pre-test scores:**

economical level	Test scores			Total
	POOR (0-5)	AVERAGE (6-10)	GOOD (11-15)	
<10000/-	4	11	0	15
10001 to 15000/-	1	9	0	10
>15000/-	1	4	0	5
<b>Total</b>	<b>6</b>	<b>49</b>	<b>0</b>	<b>30</b>
X=1.04                      p>0.05(Insignificant)				

The association of monthly income and test scores is shown in present table 3.1. The probability value for Chi-Square test is 1.04 for 2 degrees of freedom which indicated a insignificant valve ( $p>0.05$ ). Hence, it is identified that there is a insignificant association between monthly income and test scores. Moreover, it is reflected that monthly income isn't influenced with the present problem.

## VII. Results

In assessment stage, 6 (20.0%) mothers of school going children were having poor knowledge score while 24 (80.0%) were having average knowledge score, each 0 (0.0%) mothers of school going children were having good and excellent knowledge score. The knowledge score was  $7.10 \pm 2.40$ .

## VIII. Conclusion

Thus, after the analysis and interpretation of data we can conclude that the hypothesis  $RH_0$  that, there will be no significant association between knowledge score among mothers of school going children with their selected demographic variables at ( $P<0.001$ ) is being accepted.

Furthermore, Thus, mothers of school going children having average knowledge score regarding Virtual autism and its impact on child's brain development so there is need to improve knowledge of mothers of school going children residing in selected community area.

## IX. Limitations

- This was limited to selected community area, Gwalior, M.P.
- This was limited to 30 mothers of school going children.

## X. References

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