



**Research Article**

## **AWARENESS OF VIRTUAL AUTISM AMONG PARENTS**

**Satish Kumaraswamy and Amala P Binoe**

Department of Medical Oncology, Madurai Medical College, Madurai, Tamilnadu, India

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### **ABSTRACT**

Virtual autism is a syndrome caused by an overuse of electronic devices that exhibits symptoms that are similar to those of autism. Children learn language through stimulation and exposure to the environment during their critical period of development. Increased screen time in young children has been associated with detrimental health effects, including reduced cognitive function, delayed language development, and behaviours like those of autistic children, such as hyperactivity, short attention spans, and irritability. The study aimed to analyse the awareness of virtual autism among parents. A group of 50 parents (aged 25 to 35) from Kerala's Kannur district who had kids between the ages of 0 and 4 were given a list of 10 questions, and the results showed that parents have a reasonable level of awareness.

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### **INTRODUCTION**

Screen addiction is a modern-day health issue that affects both children and adults. Excessive usage of mobile phone and exposure to blue light has been shown to have an impact on child's brain, leading to Screen Dependency Disorder (SDD). During their vital era of development, children learn language through stimulation and exposure to the environment. The American Academy of Paediatrics (AAP) recommends no more than one hour of screen usage each day, and babies under the age of 18 months should avoid using mobiles.

Intensive Early Screen Exposure (IESE) has been linked to negative outcomes in a variety of areas including attention, language, emotion regulation and socialisation which are important in the diagnosis of neurodevelopmental problems like ADHD and learning difficulties. There is a rising clinical and empirical evidence supporting a causal association between early screen exposure (more than 4 hours per day) and subsequent symptoms of Autism Spectrum Disorders (ASD) in some potentially vulnerable younger children (less than 6 years old). The intervention has been consistently demonstrated to be successful with no known adverse effects. (Bruno Harley, 2019)

A virtual ASD assessment was held for participants among younger children with ASD and older individual with a history of mental retardation. A small group of people went to the assessment in person as well. The findings states that younger children with ASD may benefit from virtual assessment, but older individuals with a history of mental disorders may benefit from inperson assessment. Other variables (e.g., age,

educational services) had no effect on in person diagnosis although family history of ASD did. According to the research, individual features could be utilised to determine who would benefit from a virtual ASD diagnostic (Phelps, Sample & Greene, 2010).

Sayid (2020) developed a behavioural cognitive early intervention programme based on the Denver model. And knowing how the software affects the development of social skills in children with virtual autism. The researcher came up with the following hypothesis to test this goal. The mean ranks of the individuals of the experimental group in the pre- and post-applications on a scale do not change statistically significantly. (CASR2-ST)

Studies have suggested that psychiatric disorders are associated with problematic use of screen media. Systematic review of literature has shown the associations between screen media and autism spectrum disorder (ASD). Studies have supported the view that children and adolescents with ASD are exposed to more screen time than their typically developing peers or other clinical groups and that the exposure starts at a younger age. The content and context of screen use (e.g., with parent's vs alone) may affect the behaviours associated with media exposure.

To test the hypotheses that children with autism spectrum disorder (ASD) have higher screen time than other children on a US nationally representative sample and that children with ASD are overrepresented among children who exceed the American Academy of Paediatrics (AAP) screen time recommendation (2 hours or less a day). The parents were asked to report their child's (aged 6-17 years) average daily

*\*Corresponding author: Satish Kumaraswamy*

Department of Medical Oncology, Madurai Medical College,  
Madurai, Tamilnadu, India

media usage. The ASD subpopulation was compared to children without ASD. The results revealed that more than half of US children exceed the AAP screen time recommendation. Compared to non-ASD children with ASD had similar amounts of total screen time (3.21 hours per day vs 3.46 hours per day;  $P > .05$ ), media (TV/video) time, and computer/mobile device leisure time. Children with ASD have a milder age gradient than the general population on computer/mobile device usage. In a large, nationally representative US sample, there was no evidence that children with ASD differ in their screen time habits from other children. Both groups have high screen time use. Caution should be exercised before assuming that children with ASD are at higher risk of exceeding AAP screen time recommendations.

Felix, Kumaraswamy and Govind (2021) studied the impact of screen time with children 2-5 years by analysing their working memory and results showed that there is high significant difference for alphabets followed by months in comparison with other tasks.

The prevalence and pattern of total and device-specific screen viewing (SV) among children less than two years of age, Data was collected by interviewing mothers of the children. Increasing child age and manner of living were found to be significantly associated with higher prevalence of SV. Parental knowledge and parental practices were also found to influence the SV and screen-time in children. Modifiable factors like parental knowledge on SV, parental SV practices can help in designing health promotion strategies and recommendations on SV.(Anjali, Mohapatra I and Banerjee (2009))

### **Need For the Study**

Evaluating awareness and assessing parental knowledge regarding virtual autism, as well as how they understand and use technology, which is important in today's world. If the parents are aware of the detrimental effects that electronic devices may have on their children, they may be able to limit their usage of this medium and prevent their children from autistic-like symptoms in a syndrome known as Virtual Autism. Additionally, they can promote social interaction more, which aids in a child's language development.

## **METHADODOLOGY**

### **Aim**

The aim of the present study is to analyse the awareness of virtual autism among parents.

The study was carried out in two phases.

### **Phase I: Preparation of Questionnaire**

A set of 10 closed set (yes/no) of questions were prepared keeping in mind the above literature reviews the characteristics that are frequently exhibited in the children who are exposed to screen for longer duration

The prepared questions were validated by 10 speech language pathologists who are working in the field for more than 5 years. The corrections and suggestions advised by the speech language pathologists were incorporated and the final questionnaire was ready which is as below.

### **Appendix I**

1. Does your child use electronic gadgets?
  - Yes
  - No
2. Does your child use gadgets for more than 2 hours?
  - Yes
  - No
3. Does your child excessively use the gadgets in the absence of parent?
  - Yes
  - No
4. Does your child react when you restrict/stop the use of gadgets?
  - Yes
  - No
5. Do you engage your child to do other activities as a response to your child's reaction?
  - Yes
  - No
6. Is your child interested to be engaged in outdoor activities?
  - Yes
  - No
7. Do you spend most of your time with your child engaging in conversation?
  - Yes
  - No
8. Do you think that your child is addicted to electronic gadgets?
  - Yes
  - No
9. Are you aware about the term 'Virtual Autism'?
  - Yes
  - No
10. Do you think Virtual Autism is a type of Autism?
  - Yes
  - No

### **Phase II: Participants With Inclusive And Exclusive Criteria**

A group of 50 parents (aged 25 to 35 from Kannur district of Kerala) who had children in the age range of 0-4 years and irrespective of male and female participated in the present study. Parents and children were free from any psychological illness, hearing disorders, neurological issues and speech language disorders

### **Stimulus Used**

The prepared closed set of 10 questions was used for the collection of data.

### **Procedure**

The validated list of questions was distributed among parents. The participant's task was to read and understand the questions carefully and mark the response

### **Analysis**

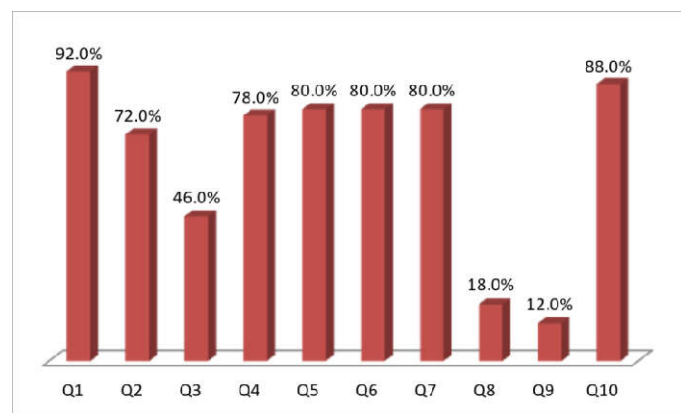
The questionnaire which was administered on parents with their response was collected and a score of 1 was given for the response 'yes' and 0 for the response 'no'. the accumulated data was further subjected to statistical analysis and the results are discussed below.

**RESULTS AND DISCUSSION**

The aim of the study was to analyse the awareness of virtual autism among parents in the age range of 25 to 35 and the results obtained from the study are discussed below

**Table I** showing the response of the parents regarding the awareness of virtual autism.

	0		1		Total	
	Count	Row N %	Count	Row N %	Count	Row N %
Q1	4	8.0%	46	92.0%	50	100.0%
Q2	14	28.0%	36	72.0%	50	100.0%
Q3	27	54.0%	23	46.0%	50	100.0%
Q4	11	22.0%	39	78.0%	50	100.0%
Q5	10	20.0%	40	80.0%	50	100.0%
Q6	10	20.0%	40	80.0%	50	100.0%
Q7	10	20.0%	40	80.0%	50	100.0%
Q8	41	82.0%	9	18.0%	50	100.0%
Q9	44	88.0%	6	12.0%	50	100.0%
Q10	6	12.0%	44	88.0%	50	100.0%



**Figure I** showing the response of parents for questionnaire

From the above tables and figure we can see that children use electronic devices at a rate of roughly 92 percent. About 72% of them regularly utilised electronic gadgets for more than two hours a day, and 46% did so without their parents' supervision. While roughly 80% of parents got their kids involved in other activities and the kids showed an interest in outside activities, 78% of kids reacted negatively to the restriction on using electronic gadgets. Approximately 80% of parents were aware that they should spend time talking to their kids. 18% of parents admitted that their kids are addicted to electronic devices. Roughly 12 percent of parents were aware of the phrase "virtual autism," yet 88 percent of parents believed that virtual autism was a kind of autism.

**Table II** showing the classification of awareness among parents

	Frequency	Percent
High	6	12.0
Low	3	6.0
Moderate	41	82.0
Total	50	100.0

	N	Minimum	Maximum	Mean	Std. Deviation
Awareness	50	4	9	6.46	1.147

Table II reveals that 82% of participants are moderately aware on effects of virtual autism whereas 12% reported high awareness and 6% are not aware about virtual autism and its effects.

**DISCUSSION**

Virtual autism is the exhibition of similar autistic-like symptoms in a syndrome due to the excessive usage of electronic gadgets. During their vital era of development children learn language through stimulation and exposure of the environment. Increased screen usage in young children has been linked to negative health outcomes such as impaired cognitive capacity, language development, autistic like behaviour such as hyperactivity, short attention span and irritability. Excessive screen time has been linked to sleep issues, weight gain, communication, sociability and the brain development, according to studies.

In comparison to youngsters who were previously more socially engaged, children around the world now spend more time with electronic screen media. The initial exposure was discovered in children of a very early age and parents actively persuade them to use electronic screen media as a companion to engage and occupy them, allowing the parents to work on their own. Surprisingly, nearly all parents said that their child under the age of two has been able to use and appreciate electronic media on a regular basis.

Various screen activities, according to Sigman (2017), generate anatomical and functional brain plasticity in adults. The structural structure of the brain connections is altered by using time in childhood.

The results have a high correlation with the studies done by Anjali, Mohapatra and Banerjee (2009) where they reported to have a higher prevalence of screen viewing as increasing the child's age and manner of living. Also, the parental knowledge and parental practices were also found to influence the screen viewing and screen time in children.

Thus, this study could provide awareness and knowledge of virtual autism on parent which plays a crucial role in the development of the children.

**CONCLUSION**

Virtual autism is a newly identified condition when babies spend hours a day on electronic gadgets such as phones, TVs tablets develop an autistic-like symptoms. The purpose of the study was to find out the awareness among parents on virtual autism and its effects. The results suggested that there is a moderate awareness of the problem among parents. Even though they are not aware on the term virtual autism, parents are aware that the excessive usage of electronic gadgets will inversely affect the child in his/her development.

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