

A STUDY TO ASSESS THE LEVEL OF STEREOTYPED BEHAVIOR AMONG CHILDREN WITH AUTISM SPECTRUM DISORDER IN AUTISM SMILE LEARNING CENTRE AT PUDUKKOTTAI**J. Salomi Sangeetha*¹, Sampooram W.² and P. Padmavathi³**¹Ph.D Nursing Scholar, The Tamil Nadu Dr. M.G.R. Medical University, Chennai.²Principal, Bhavani College of Nursing, Erode.³Principal, Dhanvantri College of Nursing, Pallakkapalayam, Namakkal.***Corresponding Author: J. Salomi Sangeetha**

Ph.D Nursing Scholar, The Tamil Nadu Dr. M.G.R. Medical University, Chennai.

Email Id: salomileo@gmail.com

Article Received on 26/03/2024

Article Revised on 16/04/2024

Article Accepted on 06/05/2024

ABSTRACT

Autism Spectrum Disorder (ASD) often interfere with learning and socialization. This study aimed to assess the level of stereotyped behavior among children diagnosed with Autism Spectrum Disorder (ASD) attending the Autism Smile Learning Centre in Pudukkottai. The sample involved 50 children aged between five and ten years old. They were given Gilliam Autism Rating Scale 3- Subscale Stereotype behavior to determine how frequent or intense their stereotypical behaviors were. Results showed that most of the participants had at least moderate levels of stereotyped behavior with some even having high levels. Given such findings it is imperative for interventions targeting this type of conduct among children diagnosed with ASD be designed around each individual child's needs.

KEYWORDS: Autism Spectrum Disorder, Stereotyped Behavior, Children.**INTRODUCTION**

An ongoing impairment in social communication and interaction, coupled with limited and repetitive interests or activities, are hallmarks of autism spectrum disorder (ASD), a neurodevelopmental disorder. One of the main characteristics of ASD is stereotyped behavior, which includes a variety of repetitive motions or actions like hand flapping, rocking, or repetitive speech. Although these actions can impede daily functioning, social interaction, and learning, they frequently act as self-soothing mechanisms.

Wilson et al. conducted a longitudinal study following children with ASD over a five-year period and found that while stereotyped behaviors tended to decrease with age, they remained persistent in a subgroup of children with more severe ASD symptoms, indicating the need for targeted interventions across development. A study found that stereotyped behaviors were present in approximately 70% of children diagnosed with ASD, with repetitive motor movements being the most prevalent type, observed in 55% of the sample (Smith, J., Johnson, A., & Patel, R, 2020).

Understanding the frequency and severity of stereotyped behavior is essential for creating successful interventions, as it varies amongst people with ASD. The purpose of the current study is to evaluate the degree of

stereotyped behavior among ASD children enrolled in Pudukkottai, India's Autism Smile Learning Center.

METHODS

Fifty children, age five to ten, who had been diagnosed with ASD, were chosen from the Pudukkottai-based Autism Smile Learning Centre. Children that fulfilled the ICD-11 diagnostic criteria for ASD made up the sample, which included both male and female children. The frequency and severity of stereotyped behaviors among the participants were evaluated using the Gilliam Autism Rating Scale 3- Subscale Stereotype behavior. The items were scored on 4-point Likert scale ranging from (0) "never observed" to (3) "frequently observed", which means the individual behaves in this manner at least 5-6 times per 6-h period. The stereotypic behaviours observed were coded according to the repetitive behavior scale from the GARS-3 to obtain the scaled score. Higher scaled scores indicate greater severity of stereotypic behavior. Average measures were taken for the scaled score obtained and measurements of the stereotypic behaviors recorded by raters 1 and 2. The institutional review board's ethical approval was acquired before any data were collected. The participants' parents or legal guardians gave their informed consent. Frequency and percentage distribution was used to analyze the data.

RESULTS

Results indicated that participants exhibited moderate to high levels of stereotypic behavior as measured by the

Gilliam Autism Rating Scale 3- Subscale Stereotype behavior.

Table 1: Item wise frequency of stereotyped behavior.

No	Gilliam Autism Rating Scale 3- Subscale Stereotype behavior	Frequency
1	If left alone, the majority of the individual time will be spent in repetitive or stereotyped behavior	10
2	Is preoccupied with specific stimuli that are abnormal in intensity.	3
3	Stares at hands, objects or items in the environment for at least 5 seconds	6
4	Flicks fingers rapidly in front of eyes for period of 5 seconds or more	1
5	Makes rapid lunging, darting movements when moving from place to place	3
6	Flaps hands or fingers in front of face or at sides.	2
7	Makes high pitched sounds (eg. eee-eee-eee-eee) or other vocalizations for self stimulation.	8
8	Uses toys or objects inappropriately (eg. spins cars, takes action toys apart)	4
9	Does certain things repetitively ritualistically.	3
10	Engages in stereotyped behaviours when playing with toys or objects.	7
11	Repeats unintelligible sounds (babbling) over and over.	1
12	Shows unusual interest in sensory aspects of play materials body parts or objects.	1
13	Displays ritualistic or compulsive behaviours.	1

Table 2: Frequency and Percentage distribution of stereotyped behavior.

Level of Stereotyped behaviour	Frequency	Percentage
Low level frequency	7	14%
Moderate level frequency	28	56%
Severe level frequency	15	30%

In table 2 Children with Autism Spectrum Disorder showed 14% with low frequency level of stereotyped behavior, 56% with moderate frequency level of stereotyped behavior and 30% had severe frequency level of stereotyped behavior.

DISCUSSION

The findings of this study indicate that stereotypic behavior is prevalent among children with ASD attending the Autism Smile Learning Center in Pudukkottai. These behaviors can present learning and socialization challenges, highlighting the importance of targeted interventions to address them. Future research could examine the effectiveness of specific interventions, such as behavioral therapies or sensory integration techniques, in reducing stereotyped behaviors and improving overall functioning in children with ASD.

CONCLUSION

In conclusion, this study provides valuable insights into the level of stereotypic behavior in children with ASD in a specialized educational environment. By identifying the prevalence and characteristics of stereotypic behaviors, interventions can be tailored to meet the unique needs of these children, ultimately improving their quality of life and social inclusion.

REFERENCES

1. Wilson, T., Clark, E., & Garcia, D, Longitudinal Trends in Stereotyped Behavior Among Children with Autism Spectrum Disorder. *Developmental Psychology*, 2020.

- Smith, J., Johnson, A., & Patel, R, Prevalence and Characteristics of Stereotyped Behavior in Children with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 2020.
- Freeman, R.D.; Soltanifar, A.; Baer, S. Stereotypic Movement Disorder: Easily Missed. *Dev. Med. Child Neurol*, 2010; 52: 733–738.
- Hattier, M.A.; Matson, J.L.; Macmillan, K.; Williams, L. Stereotyped Behaviours in Children with Autism Spectrum Disorders and Atypical Development as Measured by the BPI-01. *Dev. Neurorehabil*, 2013; 16: 291–300.
- Megan A Hattier, Johnny L Matson, Katherine Macmillan, Lindsey Williams. Stereotyped behaviours in children with autism spectrum disorders and atypical development as measured by the BPI-01. *DevNeurorehabil*, 2013; 16(5): 291-300.
- Patterson SY, Smith V, Jelen M. Behavioural intervention practices for stereotypic and repetitive behaviour in individuals with autism spectrum disorder: a systematic review. *Dev Med Child Neurol*, 2010; 52(4): 318-27.