

# Maladaptive Behaviour among Autism Spectrum Disorder (ASD) Students

## Abstract

The purpose of the study was to examine the maladaptive behaviour among autism spectrum disorder students in relation to the dimensions, which were, stereotype behaviour, self injurious behaviour, tantrums behaviour, aggressive behaviour, and ritualistic behaviour. It was found that there exists no significant difference between day boarding and residential autism spectrum disorder students on the dimensions of the maladaptive behaviour and the maladaptive behaviour as a whole. The day boarding autism spectrum disorder students showed more stereotype behaviour, tantrums behaviour, aggressive behaviour and ritualistic behaviour as compared to residential autism spectrum disorder students. Hence it is recommended that autistic students when taught with residential facilities exhibit more adaptive behaviour as compared to autistic students taught with day boarding facilities.

**Keywords:** Autism Spectrum Disorder Students, Maladaptive Behaviour, Special School.



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## Introduction

Autism Spectrum Disorder (ASD) is a developmental disability occurs due to differences in the brain. Autism is a neurodevelopment disorder characterized by impaired social interaction, verbal and non-verbal communication, and restricted and repetitive behaviour. Autism is highly variable neurodevelopment disorder that first appears during infancy or childhood, and generally follows a steady course without remission. Some children show signs of autism spectrum disorder in early infancy, such as reduced eye contact, lack of response to their name or indifference to caregivers. Other children may develop normally for the first few months or years of life, but then suddenly become withdrawn or aggressive or lose language skills they've already acquired. Signs usually are seen by age of 2 years. Maladaptive behaviour is common in people with Autism Spectrum Disorder. Autistic individual have complexity in accepting and manipulating any situation. As compared to normal individuals autistic individuals have severe sensitivity to adjust in environmental troubles. Stereotype is sometime called stemming in autism, under the hypothesis that it self stimulates one more senses. Self injurious is the most distressing and difficult behaviour faced by parents, care givers, family members and people with autism.

Crowell et al (2019) concluded that ASD is a neuro developmental disorder with complex genetic components that are influenced by the environment. Deficits in social-communication skills and a restricted, repetitive repertoire of behaviours emerge early in a child's development. While parents do not cause these difficulties, impairments in social-relatedness can strain parent child relationships and interactions and parental stress can have transactional effects that impede development.

Carmassi et al (2019) highlighted in their case study the relevance of the consequences of trauma in a female patient with an undetected autism spectrum disorder (ASD) affected by bipolar disorder (BD) with multiple co morbidities.

Docrell et al (2019) attempted to examine the relationship between the educational provision made for children with SEN in relation to diagnostic categories as opposed to assessed needs. The results demonstrated provision for children with DLD and ASD continues to be driven by diagnostic categories, and that children with ASD are significantly more likely to receive support from schools and SLTs, independent of children's language, literacy, cognitive scores and behaviour.

Ebishima et al (2019) examined the relationship between adaptive/maladaptive behaviours and the acoustic startle response (ASR) and its modulation, which are promising neuro physiological markers for

ASD translational research. Peak-ASR latency was negatively correlated with the VABS total score and socialization domain score of adaptive behaviours, while the ASR magnitude for relatively weak stimuli of 75–85 dB was positively correlated with VABS maladaptive behaviour scores. Prepulse inhibition (PPI) at the prepulse intensity of 70–75 dB was also correlated with VABS maladaptive behaviour. However, these relationships did not remain significant after adjustment for multiple comparisons.

Naito et al (2019) investigated the time course of body movements in young TD children and young children with ASD as well as the relationship between body movements during night and social ability. Seventeen TD children and 17 children with ASD. An accelerometer attached to the waist to record movements during night and measured the average time course of body movements for 3 nights. The results demonstrated that the rate of body movement 2 to 3 hours after the onset of body stillness was higher in children with ASD than in TD children. In addition, the higher rate of body movement at 0.5 to 1 hour after the onset of body stillness was associated with a lower social ability in the children with ASD. The results suggested that the time course of body movements is an objective behavioural index for young children with ASD.

Hoang et al (2019) conducted a cross sectional study on Prevalence of autism spectrum disorders and their relation to selected socio-demographic factors among children. The study revealed that the prevalence of ASD among children in Vietnam seems to be increasing. The significant correlates of ASD among the children were urban setting, male gender and mother's occupation (farmer). Further and more in-depth studies on determinants of ASD are needed to provide insights into the problem.

Lindor et al (2019) aimed to examine the influence of accompanying sleep disturbance on the established relationship between ASD symptom severity and problem behaviour in ASD. The study revealed that the relationship between ASD severity and problem behaviour varied significantly depending on the degree of accompanying sleep disturbance present.

Tye et al (2019) reviewed medical conditions that have been repeatedly highlighted as sharing the strongest associations with ASD—epilepsy, sleep, as well as gastrointestinal and immune functioning. They described within each condition their prevalence, associations with behaviour, and evidence for successful treatment.

Gurbuz et al (2019) investigated the social and academic experiences of current university students with and without autism in the UK. The systematic analysis of qualitative and quantitative data indicated both social and academic challenges for students with autism compared to non-autistic students. Autistic students self-reported significant challenges and more mental health difficulties than non-autistic students. Significant challenges focused on the social components of university life, including social skills, social support opportunities, and levels of

ASD awareness from others. Much strength was also reported regarding academic skills of autistic university students. Importantly, there were more thoughts of withdrawal by the students with autism highlighting the need for support.

It is estimated that close to 10 million people in India suffer from autism and related disorders for which there is no cure. There's no way to treat autism spectrum disorder, but there are prevention options. Early diagnosis and intervention is most helpful and can improve behaviour, skills and language development. However, intervention is helpful at any age. Though children usually don't outgrow autism spectrum disorder symptoms, they may learn to function well. Therefore, the investigator studied the maladaptive behaviour among Autism Spectrum Disorder students while comparing Autism Spectrum Disorder students studying with day boarding facilities and Autism Spectrum Disorder students studying with residential facilities

#### **Objectives of the Study**

1. To study the significant difference between the day boarding and residential autism spectrum disorder students on their stereotype behaviour.
2. To study the significant difference between the day boarding and residential autism spectrum disorder students on their self injurious behaviour.
3. To study the significant difference between the day boarding and residential autism spectrum disorder students on their tantrums behaviour.
4. To study the significant difference between the day boarding and residential autism spectrum disorder students on their aggressive behaviour.
5. To study the significant difference between the day boarding and residential autism spectrum disorder students on their ritualistic behaviour.
6. To study the significant difference between the day boarding and residential autism spectrum disorder students on their maladaptive behaviour.

#### **Hypotheses of the Study**

1. There is no significant difference between the day boarding and residential autism spectrum disorder students on their stereotype behaviour.
2. There is no significant difference between the day boarding and residential autism spectrum disorder students on their self injurious behaviour.
3. There is no significant difference between the day boarding and residential autism spectrum disorder students on their tantrums behaviour.
4. There is no significant difference between the day boarding and residential autism spectrum disorder students on their aggressive behaviour.
5. There is no significant difference between the day boarding and residential autism spectrum disorder students on their ritualistic behaviour.
6. There is no significant difference between the day boarding and residential autism spectrum disorder students on their maladaptive behaviour.

#### **Research Methodology**

Descriptive survey was used for the present study. The population constituted of all the Autism Spectrum Disorder students of the Sonipat district of

Haryana. The sample constituted of 100 Autism Spectrum Disorder students, studying in special school set up in Sonipat through Simple Random Sampling. Out of which 58 autism spectrum disorder students were studying with residential facilities and 42 autism spectrum disorder students were studying with day boarding facilities. The investigator used Autism Maladaptive Behavior Scale developed and

standardized by Nidhi Sharma and Dr. Neelam K. Sharma (2018 ).For the analysis and interpretation of data mean , standard deviation and 't'-test were used.

**Analysis and Interpretation**

1. Analysis of Mean Scores of Day Boarding and Residential Autism Spectrum Disorder Students on their Stereotype Behaviour

**Table 1**

**Significance of difference in Stereotype behaviour between Day boarding and Residential Autism Spectrum Disorder students**

Dimension	ASD Students	N	Mean	SD	SED	t-Value	Level of Significance
Stereotype Behaviour	Day boarding	58	34.72	6.82	1.433	1.4354	Not significant
	Residential	42	32.67	7.42			

From the above table, it is clear that the mean scores of day boarding Autism Spectrum Disorder students and residential Autism Spectrum Disorder students on their Stereotype behaviour are 34.72 and 32.67 respectively. The t-value between the two groups comes out to be 1.43 which is smaller than the table value at 0.05 level of significance. It is interpreted that it is not significant at both the levels of significance. It can be further observed that the day boarding Autism Spectrum Disorder students obtained higher mean scores on their Stereotype behaviour than residential Autism Spectrum Disorder student. It

is concluded that day boarding Autism Spectrum Disorder students showed more stereotype behaviour as compared to residential Autism Spectrum Disorder students.

Hence, the formulated null hypothesis no.1, that is, "There is no significant difference between the day boarding and residential Autism Spectrum Disorder students on their stereotype behaviour." is accepted.

2. Analysis of Mean Scores of Day Boarding and Residential Autism Spectrum Disorder Students on their Self-Injurious Behaviour

**Table 2**

**Significance of difference in Self-injurious behaviour between Day boarding and Residential Autism Spectrum Disorder students**

Dimension	ASD Student	N	Mean	SD	SED	t-Value	Level of Significance
Self-injurious Behaviour	Day boarding	58	38.09	7.28	1.669	0.6902	Not significant
	Residential	42	39.24	9.41			

From the above, it is clear that the mean scores of day boarding Autism Spectrum Disorder students and residential Autism Spectrum Disorder students on their self injurious behaviour are 38.09 and 39.24 respectively. The t-value between the two groups comes out to be 0.6902 which is smaller than the table value at 0.05 level of significance. It is interpreted that it is not significant at both the levels of significance. It can be further observed that the residential Autism Spectrum Disorder students obtained higher mean scores on their self injurious behaviour than day boarding Autism Spectrum

Disorder students. It is concluded that residential Autism Spectrum Disorder students showed more self injurious behaviour as compared to day boarding Autism Spectrum Disorder students.

Hence, the formulated null hypothesis no.2, that is, "There is no significant difference between the day boarding and residential Autism Spectrum Disorder students on their self injurious behaviour." is accepted.

3. Analysis of Mean Scores of Day Boarding and Residential Autism Spectrum Disorder Students on their Tantrums Behaviour

**Table 3**

**Significance of difference in Tantrums behaviour between Day boarding and Residential Autism Spectrum Disorder students**

Dimension	ASD Students	N	Mean	SD	SED	t-Value	Level of significance
Tantrums Behaviour	Day boarding	58	22.26	5.2	1.026	0.4144	Not significant
	Residential	42	21.83	4.87			

From the above table, it is clear that the mean scores of day boarding Autism Spectrum Disorder students and residential Autism Spectrum Disorder students on their tantrums behaviour is 22.26 and 21.83 respectively. The t-value between the two groups comes out to be 0.4144 which is smaller than the table value at 0.05 level of significance. It is interpreted that it is not significant at both the levels of significance. It can be further observed that the day boarding Autism Spectrum Disorder students obtained higher mean scores on

their tantrum behaviour than residential Autism Spectrum Disorder student. It is concluded that day boarding Autism Spectrum Disorder students showed more Tantrums behaviour as compared to residential Autism Spectrum Disorder students.

Hence, the formulated null hypothesis no.3, that is, "There is no significant difference between the day boarding and residential Autism Spectrum Disorder students on their tantrums behaviour." is accepted.

4. Analysis of Mean Scores of Day Boarding and Residential Autism Spectrum Disorder Students on

their Aggressive Behaviour

**Table 4**

**Significance of difference in Aggressive behaviour between Day boarding and Residential Autism Spectrum Disorder students**

Dimension	ASD Students	N	Mean	SD	SED	t-Value	Level of Significance
Aggressive Behaviour	Day boarding	58	18.72	4.01	0.905	0.4316	Not significant
	Residential	42	18.33	5.04			

From the above table it is clear that the mean scores of day boarding Autism Spectrum Disorder students and residential Autism Spectrum Disorder students on their Aggressive behaviour is 18.72 and 18.32 respectively. The t-value between the two groups comes out to be 0.4316 which is smaller than the table value at 0.05 level of significance. It is interpreted that it is not significant at both the levels of significance. It can be further observed that the day boarding Autism Spectrum Disorder students obtained higher mean scores on their Aggressive behaviour than residential Autism

Spectrum Disorder student. It is concluded that day boarding Autism Spectrum Disorder students showed more Aggressive behaviour as compared to residential Autism Spectrum Disorder students.

Hence, the formulated null hypothesis no.4, that is, "There is no significant difference between the day boarding and residential Autism Spectrum Disorder students on their Aggressive behaviour" is accepted.

5. Analysis of Mean Scores of Day Boarding and Residential Autism Spectrum Disorder Students on their Ritualistic Behaviour

**Table 5**

**Significance of difference in Ritualistic behaviour between Day boarding and Residential Autism Spectrum Disorder students**

Dimension	ASD Students	N	Mean	SD	SED	t-Value	Level of Significance
Ritualistic Behaviour	Day boarding	58	49.83	8.78	2.051	0.9025	Not significant
	Residential	42	47.98	11.74			

From the above table it is clear that the mean scores of day boarding Autism Spectrum Disorder students and residential Autism Spectrum Disorder students on their Ritualistic behaviour is 49.83 and 47.98 respectively. The t-value between the two groups comes out to be 0.9025 which is smaller than the table value at 0.05 level of significance. It is interpreted that it is not significant at both the levels of significance. It can be further observed that the day boarding Autism Spectrum Disorder students obtained higher mean scores on their Ritualistic behaviour than residential Autism

Spectrum Disorder student. It is concluded that day boarding Autism Spectrum Disorder students showed more Ritualistic behaviour as compared to residential Autism Spectrum Disorder students.

Hence, the formulated null hypothesis no.5, that is, "There is no significant difference between the day boarding and residential Autism Spectrum Disorder students on their Ritualistic behaviour." is accepted.

6 Analysis of Mean Scores of Day Boarding and Residential Autism Spectrum Disorder Students on their Maladaptive Behaviour

**Table 6**

**Significance of difference in Maladaptive behaviour between Day boarding and Residential Autism Spectrum Disorder students**

ASD Students	N	Mean	SD	SED	t-Value	Level of Significance
Day boarding	58	164.02	24.41	5.699	0.5587	Not significant
Residential	42	160.83	32.6			

From the above table it is clear that the mean scores of day boarding Autism Spectrum Disorder students and residential Autism Spectrum Disorder students on their Maladaptive behaviour is 164.02 and 160.83 respectively. The t-value between the two groups comes out to be 0.5587 which is smaller than the table value at 0.05 level of significance. It is interpreted that it is not significant at both the levels of significance. It can be further observed that the day boarding Autism Spectrum Disorder students obtained higher mean scores on their Maladaptive behaviour than residential Autism Spectrum Disorder students. It is concluded that day boarding Autism Spectrum Disorder students showed more Maladaptive behaviour as compared to residential Autism Spectrum Disorder students.

Hence, the formulated null hypothesis no.6, that is, "There is no significant difference between the day boarding and residential Autism Spectrum Disorder students on their Maladaptive behaviour." is accepted.

**Conclusion**

It is interpreted that there exists no significant difference in the maladaptive behaviour of residential and day boarding autism spectrum disorder students, hence, it is concluded that the benefits of the special education provided to autism spectrum disorder students are the same irrespective of the facilities of day boarding and residential provided to them. It is recommended that the education provided to such students in a special school helps them in adapting their behaviour with their surroundings. These children exhibit signs of improvement in their behaviour, though the

improvement is seen more in residential autism spectrum disorder students.

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