



RELATIONSHIP BETWEEN CHILDREN WITH AUTISM SPECTRUM DISORDER AND THEIR MOTHER'S LEVEL OF STRESS

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ABSTRACT This research explores the connection between children with Autism Spectrum Disorder (ASD) and their Mother's Level of Stress. Autism spectrum disorder is characterized by difficulties in communication and behavior, which can place significant strain on families. 33 children, aged 3 to 12 years, from a special school in Coimbatore, Tamil Nadu, were selected as sample by purposive sample method. The tool used was Indian Scale for Assessment of Autism (ISAA) and Parental Stress Scale (PSS). The data were collected and analysed for mean, standard deviation and correlation. The results showed that there was strong positive correlation between the severity of autism symptoms and parental stress, indicating that higher autism severity is associated with increased parental stress. These findings underscore the need for effective support systems for families dealing with Autism Spectrum Disorder.

KEYWORDS : Autism Spectrum Disorder, Parental Stress

INTRODUCTION

Autism spectrum disorder (ASD) is defined as a neurodevelopmental disorder characterized by persistent deficits in social communication and social interaction across multiple contexts, as well as restricted, repetitive patterns of behavior, interests, or activities (American Psychiatric Association, 2013). This condition impacts how individuals process information, affecting their language use, interaction with their environment, sensory responses, and learning abilities. The extent of Autism Spectrum Disorder impact can vary widely, from mild to severe, presenting multifaceted challenges for both individuals and their families.

Parenting a child with Autism Spectrum Disorder, particularly for mothers, is especially demanding due to the unique needs and challenges associated with the disorder. Mothers often bear the brunt of caregiving responsibilities, which can amplify their emotional and psychological strain (Dabrowska & Pisula, 2010). Research shows that mothers of children with autism typically report higher levels of stress compared to mothers of children with other developmental disorders or typically developing children (Estes et al., 2009). Parental stress is defined as "a set of processes that lead to aversive psychological and physiological reactions arising from attempts to adapt to the demands of parenthood" (Deater-Deckard, 2004), can significantly affect family dynamics and child development. Stress, in general, is the body's response to any change requiring attention or action (Selye, 1936), and this stress is often heightened by the additional responsibilities and emotional strain of parenting a child with Autism Spectrum Disorder.

Understanding the relationship between parental stress and autism severity is a growing area of interest in the scientific community. Understanding the relationship between maternal stress and autism severity is a growing area of interest in the scientific community. This research aims to explore how parental stress correlates with various aspects of autism severity. By investigating this complex relationship, the research seeks to enhance support systems for families affected by Autism Spectrum Disorder, ultimately improving the quality of life for both parents and children.

NEED FOR THE RESEARCH

The research will bridge the gap between maternal psychological stressors and their potential impact on children's developmental trajectories. The findings will offer valuable insights for policymakers, healthcare providers, educators, and families, contributing to more effective interventions to alleviate the adverse effects of maternal stress on children with autism.

METHODOLOGY

OBJECTIVES

- To find out the gender wise distribution of the sample.
- To assess the level of severity of autism in children.
- To find out the relationship between mother's stress and the level of autism in children.

HYPOTHESIS

- There is a statistically significant correlation between children with autism spectrum disorder and their mother's level of stress.

SAMPLE

The data were collected from a special school in and around Coimbatore district in Tamil Nadu. A total of 33 children with Autism Spectrum Disorder (ASD) and their mothers were selected through a purposive sampling method. These children were in the age range of 3 to 12 years.

TOOLS USED

1. INDIAN SCALE FOR ASSESSMENT OF AUTISM (ISAA, 2009): The ISAA was developed by the Government of India under the National Trust in collaboration with AIIMS, New Delhi. It consists of 40 items and is designed to assess the severity of autism spectrum disorder (ASD) in individuals. The scale covers five domains: Social Relationship and Reciprocity, Emotional Responsiveness, Speech-Language and Communication, Behavior Patterns, and Sensory Aspects. Each item is rated on a scale from 1 to 5, with higher scores indicating greater severity of autistic traits. The total score ranges from 40 to 200. The ISAA is widely used in India and has demonstrated good reliability and validity for diagnosing Autism Spectrum Disorder.

2. PARENTAL STRESS SCALE (PSS, 1995): This scale was developed by Judy O. Berry, EdD. It assesses the level of stress experienced by parents in their parenting role. The PSS typically consists of a series of questions evaluating dimensions such as parent-child dysfunctional interaction, parental distress, and the perceived difficulty of the child's behavior. Each item is usually rated on a Likert scale (e.g., 1-5), with higher scores indicating higher levels of parental stress. The scale has been validated and shown to have good reliability in measuring parental stress.

ANALYSIS OF DATA

Statistical analysis was conducted using SPSS version 26 to test the hypothesis. Pearson's correlation was used to examine the relationship between parental stress and the severity of autism in children.

RESULTS & DISCUSSION

Table-1 Test of Normality

GROUPS	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Autism	.132	33	.155	.245	33	.245
Mother's Stress	.072	33	.200	.883	33	.883

Table 1 shows the results of the normality tests (Kolmogorov-Smirnov and Shapiro-Wilk) conducted on both ISAA (possibly representing autism severity scores) and parental stress levels. The significance values (p-values) for both tests exceed 0.05, indicating that the data for both variables follow a normal distribution. This is crucial, as it

justifies the use of parametric statistical methods, such as Pearson's correlation, in further analysis.

Table - 2 Gender-Wise Distribution of The Sample

GENDER	N	%
MALE	23	69.7
FEMALE	10	30.3

Table 2 presents the gender distribution of the sample, revealing that the majority of participants are male (69.7%), while females constitute 30.3%. This reflects the higher prevalence of autism in males but highlights a gender imbalance in the sample that may affect the generalizability of the findings.

Table - 3 Descriptive Statistics

GROUPS	MEAN	Std. Deviation
Autism	129.94	16.374
Mother's Stress	64.02	8.249

Table 3 provides descriptive statistics, showing that the mean ISSAA score is 129.94, with a standard deviation of 16.374, indicating a sample with moderate to severe autism. Meanwhile, the mean maternal stress score is 64.02, suggesting elevated stress levels among mothers, with a relatively smaller variability (SD = 8.249).

Table - 4 Correlation between Parental stress and levels of Autism

GROUPS	MOTHER'S STRESS	AUTISM
Autism	0.987**	1
Mother's Stress	1	

Table-4 reveals a strong positive correlation ($r = 0.987$) between maternal stress and the severity of autism in children, consistent with existing literature (Shahbaz et al., 2023; Hamidon et al., 2024). This significant relationship underscores the complex connection between the intensity of autism symptoms and the emotional and psychological strain experienced by parents. As the severity of autism symptoms increases, parents tend to report higher stress levels, emphasizing the demanding nature of caring for children with more severe autism (Shahbaz et al., 2023; Hamidon et al., 2024).

Social support plays a pivotal role in mitigating this stress. Parents with stronger support systems report lower levels of stress, highlighting the importance of emotional and practical support (Musayarooh et al., 2024). Additionally, educational attainment is linked to reduced stress, with parents who have higher education levels experiencing less psychological strain, possibly due to better access to resources and coping strategies (Ha et al., 2024).

Although the correlation between autism severity and maternal stress is strong, individual circumstances, support systems, and personal resilience can influence stress levels, leading to variability among parents. These findings highlight the need for personalized approaches to support parents of children with autism, with a focus on strengthening social networks and providing access to educational resources (Hamidon et al., 2024). Thus, Hypothesis "There is a statistically significant correlation between children with autism spectrum disorder and their mother's level of stress" is supported.

CONCLUSION

- The data for the variable follows the normal distribution.
- Majority of the sample were boys.
- The sample belongs to mild to moderate Autism.
- Mothers have high levels of stress.
- There is a strong positive correlation between maternal stress and the severity of autism in children.

IMPLICATIONS OF THE RESEARCH

The research findings have several implications for practice and policy. Recognizing the correlation between parental stress and autism severity can inform the development of targeted interventions aimed at reducing parental stress. This could include providing social support, educational resources, and access to healthcare services tailored to the needs of families with children with autism. Such interventions can improve the overall quality of life for both parents and children, leading to better outcomes in terms of mental health, family dynamics, and child development.

LIMITATIONS OF THE RESEARCH

1. Limited to 30 participants.

2. Confined to Coimbatore district.
3. Potential limitations in capturing the full spectrum of parental stress and autism severity. Use multiple assessment tools for comprehensive understanding.
4. No longitudinal analysis. Conduct longitudinal studies to examine changes in parental stress over time.
5. Did not fully explore socioeconomic impact on parental stress. Investigate socioeconomic status impact on parental stress levels.

SUGGESTIONS FOR FURTHER RESEARCH

- Studies with larger and more diverse samples can be conducted.
- Research can be done with various geographical locations.
- Intervention can be included in further studies for both children with autism and their mothers.
- Fathers can also be included in further research.

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