

Association Between Socioeconomic Status and Quality of Life of Parents of Children With ASD: A Correlation Study

Sneha^{1*}, Dr. Pooja Kaushik², Prof. (Dr.) R.K Sharma³

¹*Master of Occupational Therapy (paediatrics) student,

²Assistant Professor, Department of Occupational Therapy, Santosh College of Occupational Therapy Ghaziabad,

³Dean Paramedical and Principal Santosh College of Occupational Therapy Ghaziabad

ABSTRACT

Background: Parents of children with autism spectrum disorder (ASD) often face emotional, psychological, and financial challenges. The socioeconomic status (SES) of these parents can significantly impact their quality of life, affecting stress levels, mental health, and access to resources. Lower SES may increase difficulties in managing caregiving responsibilities, potentially reducing parents' overall well-being. This study explores the correlation between SES and the quality of life of parents of children with ASD.

Study Design: A Correlational study.

Aim: To evaluate the association between socioeconomic and Quality of life of parents of children with autism spectrum disorder.

Objective:

- To assess socioeconomic status of parents of children with autism spectrum disorder.
- To evaluate Quality of life of parents of children with autism spectrum disorder.
- To find a relation between socioeconomic status and Quality of life of parents of children with autism spectrum disorder.

Participants: The study included 126 children with autism spectrum disorder as per the inclusion and exclusion criteria.

Methods: This study uses a correlational design to examine the relationship between socioeconomic status and the quality of life of parents of children with autism spectrum disorder, aged 2 to 6 years.

Results: A significant positive correlation was observed between socioeconomic status and the quality of life of parents of children with ASD across all domains. Higher SES was positively associated with better physical health ($r = 0.581$, $p < 0.001$), improved psychological well-being ($r = 0.521$, $p < 0.001$), stronger social relationships ($r = 0.428$, $p < 0.001$), and a more favorable living environment ($r = 0.430$, $p < 0.001$). These findings emphasize the critical role of socioeconomic factors in shaping the overall quality of life for this population.

Conclusion: The study demonstrates a strong positive relationship between socioeconomic status and the quality of life of parents of children with autism spectrum disorder (ASD). Higher socioeconomic status is significantly correlated with better physical health, greater psychological well-being, stronger social relationships, and a more favorable living environment, as reflected in the WHOQOL domain scores.

Keywords: Socioeconomic status, Quality of life, Behavior.

INTRODUCTION

Autism spectrum disorder (ASD) is a developmental disability characterized by persistent impairments in social interaction and the presence of restricted, repetitive patterns of behaviours, interests, or activities that can cause a wide array of difficulties in social interaction, communication, and participation in daily activities¹

Stereotypical behaviours (SB), also known as repetitive and restrictive behaviours, are one of the iconic symptoms in children with autism spectrum disorder (ASD)². According to DSM-5 diagnostic criteria individuals with ASD must exhibit at least one symptom from a heterogeneous set of SB of interest³.

In societies rich and poor, those of greater privilege tend to enjoy better health. Among older adults in Britain and the United States, a move from the top education or income tercile to the bottom tercile is associated with an increase of at least fifteen percentage points in the likelihood of reporting fair or poor health (Banks et al. forthcoming)⁴.

A variety of socioeconomic variables—including income, education, occupation, race, and ethnicity, among others—exhibit similar associations with health, many researchers have come to agree that “a broader underlying dimension of social stratification or social ordering is the potent factor” so that the various SES variables primarily serve as indicators, or ‘markers,’ of this underlying dimension. This view emphasizes the broad influence of SES, rather than the effects of specific resources and hierarchies.⁵

Quality of life (QOL) can be defined in many ways, making its measurement and incorporation into scientific study difficult. As illness and its treatment affect the psychological, social and economic wellbeing, as well as the biological

integrity, of individuals, any definition should be all encompassing while allowing individual components to be delineated⁵.

Understanding the relationship between SES and the quality of life of parents of children with ASD is crucial for developing targeted interventions and support systems that address the unique needs of these families. Studies have shown that parents of children with ASD are more likely to experience higher levels of stress, anxiety, and depression compared to parents of typically developing children. The interplay between SES and parental well-being is a complex but vital area of research, as it can inform policies aimed at alleviating the challenges faced by these families.^{3,5,6}

This study aims to explore the correlation between socioeconomic status and the quality of life of parents of children with ASD. By examining the ways in which different SES factors influence parents' emotional, social, and physical well-being, this research hopes to contribute valuable insights that can guide interventions to improve the lives of these families.

1. METHODOLOGY

A Correlational study was conducted in Santosh Medical Hospital and Happiness - A Life Care Therapy Center, Ghaziabad to explore the correlation between socioeconomic status and the quality of life of parents of children with ASD. Participants were recruited as per the inclusion and exclusion criteria after obtaining informed consent from the parents.

Inclusion Criteria:

1. Parents of children diagnosed with autism spectrum disorder (ASD), aged between 2 and 6 years.
2. Children aged between 2 and 6 years.
3. Both male and female children.
4. Parents with a basic understanding of English or Hindi.

Exclusion Criteria:

1. Parents with more than one child diagnosed with autism spectrum disorder.
2. Parents of children diagnosed with any other condition besides ASD.
3. Parents with diagnosed medical conditions.
4. Parents with children exhibiting behavioral issues such as ADD or ADHD.

Outcome Measures:

Kuppuswamy Socioeconomic Status Scale:

The modified Kuppuswamy SES scale is used to measure socioeconomic status in urban and rural settings. The scale considers the family head's education, occupation, and family income. The score ranges from 0 to 29.

WHOQOL-100 SRAS:

The WHOQOL-100 assesses individuals' perceptions of their quality of life in the context of culture and values. It covers multiple dimensions such as physical health, psychological well-being, social relationships, and environment.

DATA COLLECTION

Data for this study were collected from 126 children aged 2-6 years, selected from Santosh Medical Hospital and Happiness - A Life Care Therapy Center, Ghaziabad. Informed consent was obtained from the parents or legal guardians of each child before participation. The study incorporated two primary tools: the Kuppuswamy SES scale and the WHOQOL-100 SRAS, to assess socioeconomic status and the quality of life of the parents.

DATA ANALYSIS

After the completion of data collection, the data were compiled into a master chart and analyzed using IBM SPSS. Spearman's rho correlation coefficient was employed to assess the relationship between socioeconomic status and quality of life.

RESULT

The demographic and socioeconomic characteristics of the sample population reveal several important trends across age, gender, socioeconomic status, and quality of life. Regarding age distribution, 8% of participants (10 individuals) are aged 20–29, while 40% (51 individuals) fall within the 30–39 age group. The majority, 47% (59 individuals), belong to the 40–49 age range, and only 5% (6 individuals) are aged 50–59. This indicates a concentration within the 30–49 age range. Gender distribution shows a significant imbalance, with 22% (28 individuals) of participants being male and 78% (98 individuals) being female, demonstrating a predominance of females in the sample.

The quality of life, assessed using the WHOQOL Scale across four domains—Physical Health, Psychological Health, Social Relationships, and Environment—yields the following mean scores: 59.484 for Physical Health, 50.143 for

Psychological Health, 45.698 for Social Relationships, and 46.603 for Environment mentioned in table 1. The standard errors for the Kuppuswamy Scale and the WHOQOL domains indicate precision in these estimates, with standard deviation values ranging from 15.174 to 16.386 for the WHOQOL domains and 4.686 for the Kuppuswamy Scale. The sample variance further reflects variability within the data, calculated as the square of the standard deviation.

Table 1. Descriptive Stats of KUPPUSWAMY Scale and WHOQOL Scale

Statistics	KUPPUSWAMY Scale	WHOQOL SCALE			
		Physical Health	Psychological	Social Relationship	Environment
Mean	19.468	59.484	50.143	45.698	46.603
Standard Error	0.418	1.352	1.460	1.434	1.402
Standard Deviation	4.686	15.174	16.386	16.094	15.739
Sample Variance	21.963	230.252	268.507	259.028	247.713

A significant positive correlation is observed between socioeconomic status and the quality of life of parents of children with autism spectrum disorder (ASD) across all domains. Higher socioeconomic status is positively associated with better physical health ($r = 0.581$, $p < 0.001$), improved psychological well-being ($r = 0.521$, $p < 0.001$), stronger social relationships ($r = 0.428$, $p < 0.001$), and a more favorable living environment ($r = 0.430$, $p < 0.001$) mentioned in table 2. These findings emphasize the critical role of socioeconomic factors in shaping the overall quality of life for this population.

Table 2. Non-Parametric Spearman's Rho Correlation among Kuppuswamy Scale and WHOQOL (Physical Health, Psychological Health, Social Relationships, and Environment)

	Kuppuswamy Scale	Physical Health	Psychological Health	Social Relationships	Environment
Spearman's rho	Correlation Coefficient	1	0.581**	0.521**	0.428**
	Sig. (2-tailed)	.	<0.001	<0.001	<0.001
	N	126	126	126	126
Physical Health	Correlation Coefficient	0.581**	1	0.873**	0.802**
	Sig. (2-tailed)	<0.001	.	<0.001	<0.001
	N	126	126	126	126
Psychological Health	Correlation Coefficient	0.521**	0.873**	1	0.827**
	Sig. (2-tailed)	<0.001	<0.001	.	<0.001
	N	126	126	126	126
Social Relationships	Correlation Coefficient	0.428**	0.802**	0.827**	1
	Sig. (2-tailed)	<0.001	<0.001	<0.001	.
	N	126	126	126	126
Environment	Correlation Coefficient	0.430**	0.837**	0.825**	0.828**
	Sig. (2-tailed)	<0.001	<0.001	<0.001	<0.001
	N	126	126	126	126

Note: Correlation is significant at the 0.01 level (2-tailed).

These results demonstrate the strong positive relationship between socioeconomic status and various domains of quality of life for parents of children with ASD.

DISCUSSION

The demographic and socioeconomic characteristics of the sample population reveal several important trends that influence the quality of life (QoL) of parents of children with autism spectrum disorder (ASD). The age distribution shows a clear concentration in the 30–49 age group, with 87% of participants falling within this range. This age group likely represents parents who are in the midst of managing both family responsibilities and the demands of caregiving, which can affect their well-being. The higher percentage of female participants (78%) is consistent with findings in other studies, where women are often the primary caregivers in families with children with ASD, reflecting gendered caregiving roles (Gray, 2003)⁷. This imbalance in gender distribution might contribute to the findings on parental stress and quality of life, as caregiving responsibilities tend to be more burdensome for mothers, leading to greater psychological distress (Davis & Carter, 2008)⁶.

The mean scores for quality of life across the WHOQOL domains—Physical Health, Psychological Health, Social Relationships, and Environment—indicate that, overall, parents of children with ASD experience moderate to low quality of life, particularly in the areas of social relationships and environment. The relatively lower score in the social relationship's domain (45.698) suggests that parents may face challenges in maintaining social connections, which is consistent with literature showing that parents of children with ASD often experience social isolation (Hartley et al., 2012)⁹. Additionally, the environment domain score (46.603) reflects potential limitations in access to resources and

support, which can be more pronounced for those from lower socioeconomic backgrounds (Miodrag & Hodapp, 2010)¹⁰.

The positive correlations found between socioeconomic status (SES) and QoL across all four domains are particularly noteworthy. Higher SES is associated with better physical health, psychological well-being, social relationships, and environment. These findings align with previous research that demonstrates the significant role of SES in shaping the experiences of parents of children with disabilities. For example, higher SES is linked to better access to healthcare and early interventions, which in turn may reduce stress and improve both physical and psychological health (Herring et al., 2014)⁹. Furthermore, families with higher SES often have greater social capital, allowing for more robust social support networks and lessened social isolation (Hartley et al., 2012). This can explain the stronger social relationships observed among parents with higher SES¹⁰.

The significant correlation between SES and quality of life highlights the importance of addressing socioeconomic disparities when designing interventions for parents of children with ASD. Efforts to improve access to resources, healthcare, and social support for lower-income families could significantly improve their QoL, particularly in the areas of social relationships and environmental factors. These findings call for policymakers and healthcare providers to consider SES when developing programs and support systems for families affected by ASD, ensuring that all parents have equitable access to the resources necessary to maintain their well-being.

In conclusion, this study underscores the critical role of socioeconomic factors in determining the quality of life of parents of children with ASD. The results suggest that improving the socioeconomic conditions of these parents can lead to significant improvements in their overall health, psychological well-being, social relationships, and living environment. Further research is needed to explore the specific mechanisms through which SES impacts these domains and to develop targeted interventions that can mitigate the challenges faced by families from lower socioeconomic backgrounds.

CONCLUSION

In conclusion, the study demonstrates a strong positive relationship between socioeconomic status and the quality of life of parents of children with autism spectrum disorder (ASD). Higher socioeconomic status significantly correlates with better physical health, greater psychological well-being, stronger social relationships, and a more favourable living environment, as reflected in the WHOQOL domain scores. These positive outcomes highlight the critical role of socioeconomic advantages in enhancing resilience, access to resources, and overall well-being for this population.

LIMITATIONS

1. The study is cross-sectional rather than experimental, meaning it only examines the relationship between socioeconomic status and quality of life at a single point in time, limiting the ability to establish causality.
2. The study specifically focused on children aged 2 to 6 years, which restricts the generalizability of the findings to other age groups.
3. The socioeconomic status of participants was not directly observed, which could lead to social desirability bias, potentially influencing the accuracy of the reported data.

FUTURE RECOMMENDATIONS

Future research should delve into the mechanisms linking socioeconomic status to quality of life. This could include examining factors such as activity levels, dietary habits, and psychological well-being. A deeper understanding of these connections would allow healthcare providers to develop comprehensive strategies that promote a balance between quality of life and improved socioeconomic status for parents of children with autism. Such interventions could address the multifaceted challenges faced by these parents, leading to more effective support systems.

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