
INFLUENCE OF PARENTAL SOCIOECONOMIC STATUS ON THE ACADEMIC PERFORMANCE OF LEARNERS WITH AUTISM SPECTRUM DISORDER IN NIGERIA

¹Bolanle Titilayo SEGILOLA & ²Sabina Nwakaego OBI

¹Department of Arts and Social Science Education,
Lead City University, Ibadan, Nigeria

²Department of Guidance and Counselling,
Bingham University, Karu Nasarawa State, Nigeria

Abstract

Learners with Autism Spectrum Disorder (ASD) often face unique challenges that hinder their social interaction, communication, and acceptable behavioral patterns, especially within the school environment. In Nigeria, the life expectations for these learners are often limited to vocational skills, overlooking their academic potential. This study investigates how parental socioeconomic status (SES) factors—such as gender, educational qualification, and income level—influence the academic achievement of ASD learners in inclusive schools. A self-designed questionnaire, validated through face and content validity and found reliable with a Cronbach alpha of 0.76, was used to collect data from 50 participants selected through a multi-stage sampling technique. Three null hypotheses, set at a 0.05 significance level, were tested using Pearson Product Moment Correlation (PPMC). Results showed significant influence of the SES factors on the academic performance of learners with ASD, leading to the rejection of all null hypotheses. The study concluded that parental SES plays a crucial role in shaping the

educational outcomes of ASD learners. It recommends that parents of children with ASD seek professional guidance and develop knowledge that can effectively support their children's academic growth, thereby improving their life prospects beyond vocational skills.

Keywords: Socio-economic status(SES), Academic performance, Autism Spectrum Disorder (ASD).

Introduction

It is widely accepted that positive familiar interactions significantly enhance the comprehension and implementation of instructional guidance received from both schools and society. When parents exhibit strong relational strategies in their interactions with children, it fosters a supportive environment that enhances the child's ability to understand and act on educational instructions effectively. This successful implementation is closely linked to various factors such as the guidance, competence, and patience of the parents, who are key facilitators in shaping the child's developmental outcomes. Notably, factors such as parental educational background, gender roles, level of income, and overall social exposure have been identified as crucial influences in a child's functional development and academic performance. When these factors collectively contribute to home-front support, they affect the learner's academic trajectory and general achievements positively.

This study specifically focuses on learners with Autism Spectrum Disorder (ASD) and the pivotal role that parental socio-economic characteristics play in supporting their academic performance. ASD is a neuro developmental condition formerly categorised into distinct disorders such as Autistic Disorder (Kanner Syndrome), Asperger Syndrome, Childhood Disintegrative Disorder, and Pervasive Developmental Disorder. These categories have since been consolidated under the broader term Autism Spectrum Disorder (ASD) (Jadhav, 2021). ASD is characterised by persistent deficits in social communication and interaction, coupled with restricted and repetitive patterns of behaviour, interests, or activities (The Carmen B. Pingree Centre, 2020). These challenges often isolate the affected

individuals in a world of their own sensory experiences, which contrast sharply with the social interactions typical of neurotypical individuals (WHO, 2023).

In Nigeria, the number of ASD learners was notably low compared to neurotypical learners, a disparity attributed to various cultural, religious, and environmental factors (Bakare, Ebigbo, & Ubochi, 2012). Recent study noted an increase in ASD prevalence from 0.8 % to 1.2% among early ages to 17 years in Nigeria (Folorunso, 2025). Many parents often remain in denial regarding their child's condition, influenced by societal stigmas, religious misconceptions, and a lack of awareness. This denial hampers timely intervention and the adoption of inclusive academic practices. However, it is imperative that equal attention be given to learners with ASD as to their neurotypical counterparts, particularly in inclusive classroom settings. Doing so aligns with the United Nations' Sustainable Development Goal 4, which advocates for inclusive and equitable quality education for all learners regardless of their condition (United Nations, 2018).

While existing research has extensively explored the role of parental support in the academic improvement of neurotypical learners, limited attention has been given to the academic needs of learners with ASD (Odojin, 2020; Yan, Hou & Liang, 2023). Much of the current interventions for ASD in schools focus on clinical and psychoanalytic therapies rather than academic-functional strategies tailored to enhance cognitive and scholastic performance (Segilola & Adeyemi, 2022). While therapeutic interventions are important, they should not overshadow the need for academic development. Parents and schools must acknowledge that academic advancement is just as essential for ASD learners as their therapeutic care.

Additionally, there is a growing body of work examining how socio-economic status (SES) affects neurotypical learners' academic achievement, but studies focusing on ASD learners remain scarce (Poon, 2020). The existing educational structure tends to emphasise achievement in terms of grades and test scores, a system better suited to neurotypical students. Learners with ASD, however, benefit more from performance-based evaluations that focus on skill acquisition, task mastery, and individual capabilities (Yan et al., 2023). This study

seeks to bridge this gap by analysing how parental socio-economic factors-specifically gender, educational background, and income - impact academic performance among ASD learners.

The academic engagement of ASD learners can be better understood through the lens of Cognitive Learning Theory. This theory explains how learners receive, process, store, and retrieve information. In the case of ASD learners, it provides insight into their cognitive processing styles and behavioral responses. Understanding how ASD learners perceive and interact with the world around them helps educators and parents adopt more effective support strategies (Ruiz-Martins & Rodger, 2022). Cognitive learning processes - namely encoding, storage, and retrieval - play a crucial role in knowledge acquisition. For ASD learners, perceptive cognition is especially important, as it emphasises the connection between internal mental processes and external support systems (Rutherford & Johnston, 2019; Diaz & DeLecce, 2023). By optimizing cognitive processes, educators and caregivers can facilitate better retention and performance among ASD learners.

Socio-economic status is broadly defined as a combination of a person's access to material resources and their social positioning within society. For this study, SES is operationalised through three variables: gender, educational qualification, and income level. In the Nigerian cultural context, traditional gender roles once dictated that men serve as financial providers while women managed the home and children's well-being. However, these roles are evolving due to economic pressures and cultural shifts, necessitating that both parents actively participate in their child's academic development (Doi, Mizuno & Fujiwara, 2023).

Regarding educational background, past societal norms often elevated social status based on academic qualifications. However, this trend is changing, as many Nigerian parents now prioritize economic mobility and seek financial independence through entrepreneurship and multiple income streams rather than furthering formal education. A significant number of parents involved in this study had only attained first-degree qualifications. Concerning income, most participants earned less than ₦500,000 monthly (approximately \$325 USD), falling closely below the global average for sustainable living.

(United Nations Global Compact 2024). In contrast, parents in countries such as China, where socio-economic systems are more regulated, demonstrate a higher level of academic involvement in their ASD children's education, regardless of their own income levels (Yan et al., 2023).

This study also unearthed several compounding factors that may influence the core variables of gender, education, and income. These include inadequate knowledge about ASD, denial of diagnosis, religious beliefs, socio-cultural expectations, ignorance, and general living standards (Fontinelle, 2024). These additional elements further complicate parental involvement and raise questions about the depth of understanding and readiness among Nigerian parents to support their children with ASD academically.

Given these complexities, it becomes essential to explore how the identified variables - parental gender, educational background, and income - can be effectively managed and harnessed to support the academic performance of children with ASD from the home front. This exploration is crucial not only for improving individual learning outcomes but also for informing educational policy, curriculum content, and inclusive pedagogical practices that bridge the gap between home and school environments.

The learning approaches for the learners with ASD, in most cases had been limited to vocational studies and perhaps skill acquisitions. These courses had not fully explored the academic potentials of ASD learners, because the principles of ASD cognitive learning theory had not been fully explored, neither has the pedagogy been given a critical sense of review (Doi, Mizuno & Fujiwara, 2021). The problem identified in this study is poor academic performance of ASD learners, which in turn leads to non-integration of functional vocational abilities, thereby resulting to poor academic achievement. The aim of this study is to determine the influence of parental socioeconomic status on the academic performance of ASD learners in Nigerian inclusive schools.

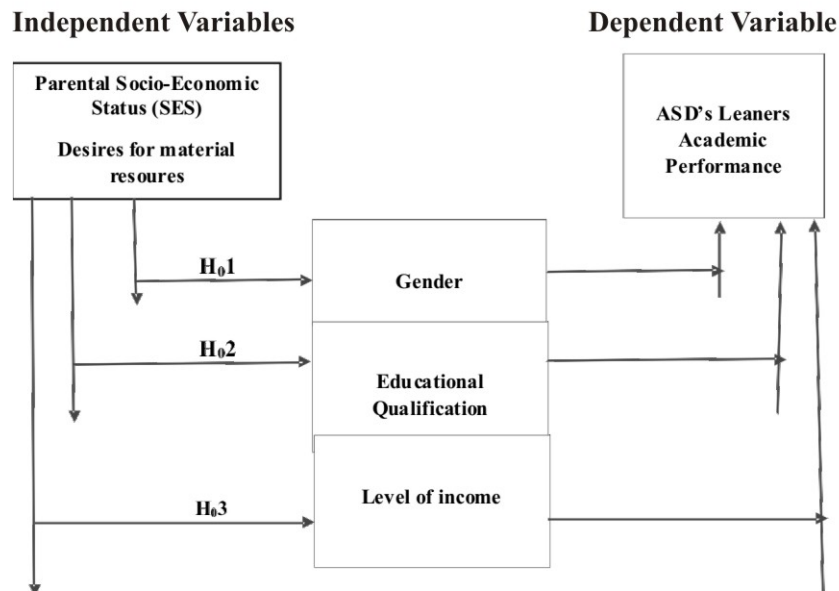
The specific objectives are to:

1. determine the influence of gender on ASD learner's academic performance;

2. determine the influence of educational qualification of the parents on ASD learner's academic performance; and
3. determine the influence of parents' level of income on ASD learner's academic performance.

Model of Parents' SES on ASD Learner's Academic Performance:

This study proposed a model of an operational approach system, with basic influence of SES as gender, educational qualification and level of income of parents in support of the academic performance of the ASD learner (Buijs, Jeronimus, Lodder, & Wrzus, 2022).



Moderating Variables

Fig. 1: Model of Parents' SES on ASD Learner's Academic Performance

Hypothesis

The following hypotheses are raised for investigation:

H₀1: There will be no significant influence of parental gender on the academic performance of ASD learners in inclusive schools at 0.05 level of significance.

- H₀2:** There will be no significant influence of education qualification of parents on the academic performance of ASD learners in inclusive schools at 0.05 level of significance.
- H₀3:** There will be no significant influence of parental level of income on the academic performance of ASD learners in inclusive schools at 0.05 level of significance.

Methods

This study adopted a correlational research design to investigate the relationship between socio-economic and family factors and the academic performance of ASD learners in Nigeria. The target population of fifty (50) parents of ASD learners who had assessed their children using the Academic Functional Learning Aptitude Tool (AFLAT), and parents of children formally diagnosed through clinical or medical assessment (Segilola et al, 2022). All participating learners were enrolled in inclusive schools across selected regions of Nigeria. A multi-stage sampling technique was used - first, simple random sampling to select five representative geopolitical zones in Nigeria: South-West, South-East, South-South, North-West, and North-Central. Next, stratified random to classify inclusive schools in these regions into urban and sub-urban categories. Finally, convenience sampling to select seven (7) inclusive schools that participated in the study. Parent participants were drawn from both physical and virtual sources, yielding twenty-nine (29) parents who completed the Google Form version of the questionnaire and twenty-one (21) who responded using hard copy versions administered during a field visit.

Data collection was facilitated through the SEN-D Parents Socioeconomic Status (SP-SES) Questionnaire, designed based on observations during interactions with ASD learners, their teachers, and parents. The questionnaire consisted of demographic items and four core measures reflecting socio-economic impact on academic performance: standard of living, family and social relationships, parental assistance to ASD learners, and academic performance. Responses were rated on a 4-point Likert scale: Strongly Agree (4), Agree (3), Disagree (2), and Strongly Disagree (1). Cronbach Alpha reliability used to check the level of consistency of the items is 0.761 and on standardised items is 0.767 for all the 40 items (Taylor, 2023). This indicates that the items are consistent across the Nigerian regions

where they are administered.

Prior to data collection, the researcher engaged in a thirteen-month awareness campaign, conducting both physical and virtual meetings with parents in participating schools to promote an understanding for the purpose of the study and the importance of improving academic outcomes for ASD learners. Parental consent was further sought from the school authorities to enable the researcher collect data. Orientation sessions were also held to assist parents in completing the questionnaire, with interpreters provided in Northern states where language barriers were present.

Descriptive statistics-frequency and percentage were used to analyse demographic characteristics. To test the study's hypotheses, Pearson's Product Moment Correlation (PPMC) was used at a 0.05 level of significance to examine the strengths and directions of the influence of socio-economic status on ASD learner's academic performance.

Results

Table 1: Description between-subject Factors in Frequency and Percentage

Variables	Value Label	Frequency	Percentage	N
Gender	1-Male	23	46	50
	2-Female	27	54	50
Qualification	1-WAEC/NECO	3	6	50
	2-Bachelors	32	64	50
	3-Post-Graduate	15	30	50
Income	1-below N100,000	18	36	50
	2- up N500,000	21	42	50
	3-above N500,000	4	8	50
	4-others undefined	7	14	50

Table 1 shows that 54% of the participants are female and 46% are male gender. For level of qualification, more parents had bachelor degree at 64%, followed by post-graduate degree at 30% and WAEC/NECO at 6%. For income, 36% earn below ₦100,000:00, 42% earn up to ₦500,000:00, 8% earn above up to ₦500,000:00 and 14%'s earning source are undefined.

Hypotheses

H₀1: There will be no significant influence of parental gender on the academic performance of ASD learners in inclusive schools at 0.05 level of significance.

Table 2: Pearson Correlation of Gender's Influence on Academic Performance

Variables	Correlation	Gender	Academic Performance
Gender	Pearson Correlation	1	.001
	Sig. (2-tailed)	0.993	
	Sum of Squares and Cross-products	12.420	.320
	N	50	50
Academic Performance	Pearson Correlation	.001	1
	Sig. (2-tailed)	.993	
	Sum of Squares and Cross-products	.320	4892.720
	N	50	50

Pearson correlation shows 0.993 positive influence in the direction of male gender on the academic performance of ASD learners. This result shows a high positive influence of male gender on the academic performance of ASD learners, such the null hypothesis was rejected.

H₀2: There will be no significant influence of education qualification of parents on the academic performance of ASD learners in inclusive schools at 0.05 level of significance.

Table 3: Pearson Correlation of Parent's Education Qualification Influence on ASD Academic Performance

Variables	Correlation	Qualification	Academic Performance
Qualification Pearson	Correlation	1	.191
	Sig. (2-tailed)	.184	
	Sum of Squares and Cross-products	15.120	51.920
	N	50	50
Academic Performance	Pearson Correlation	.191	1
	Sig. (2-tailed)	.184	
	Sum of Squares and Cross-products	51.920	4892.720
	N	50	50

The Pearson correlation reveals 0.184 low positive influence of education qualification (WAEC/NECO) of parents on the academic performance of ASD learners in this study. This result shows that despite the level of education of the parents, there is little influence that the parents have on their ASD's academic performance, such the null hypothesis is rejected.

H₀3: There will be no significant influence of parental level of income on the academic performance of ASD learners in inclusive schools at 0.05 level of significance.

Table 4: Pearson Correlation of Parent's Income Influence on ASD Academic Performance

Variables	Correlation	Income	Academic Performance
Income	Pearson Correlation	1	.137
	Sig. (2-tailed)		.341
	Sum of Squares and Cross-products	50.000	68.000
	N	50	50
Academic Performance	Pearson Correlation	.137	1
	Sig. (2-tailed)	.341	
	Sum of Squares and Cross-products	68.000	4892.720
	N	50	50

The Pearson correlation result revealed 0.137 low positive influence of parents' level of income on the academic performance of ASD learners in this study. This result shows that parental income has very little influence on their ASD's academic performance, such null hypothesis is rejected.

Discussions

The descriptive statistics show more female (54%) participation than male (46%). However, gender had a high positive influence (0.993) on ASD academic performance, suggesting more male involvement. Parental qualification had minimal influence (0.184), indicating that academic success depends more on understanding interventions than formal education. Income also showed low positive influence (0.137), implying limited financial support, with parents relying mainly on standard teaching methods for their ASD children.

Conclusion

The findings show that socio-economic factors significantly influence ASD learners' academic performance, with varying strengths. All null hypotheses were rejected. Parental involvement, regardless of gender, positively impacts performance. However, low income and qualification limit the ability to provide necessary academic resources and support for improved outcomes.

Recommendations

Parents should actively learn about their ASD child's condition using available online resources and seek regular advice from school professionals. Improving income sources can help fund necessary academic support. Engaging in home-based learning and attending support programs with other parents can enhance involvement strategies. Staying informed ensures parents adapt to new interventions as their child reaches developmental milestones (Buijs, et. al, 2022).

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