

# Relationship among Nuclear Family, Extended Family, Single Parent Family and Academic Performance of Senior Secondary School Students in Sokoto, Kebbi and Zamfara States, Nigeria

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**Abstract:** This research investigated how nuclear and extended family structures relate to the academic performance of senior secondary school students in Sokoto State, Nigeria. The study was guided by three main objectives and research questions. It utilized a descriptive correlational design, targeting a population of 16,033 students across three educational zones, with a sample size of 346 participants. Data was gathered through validated instruments, such as the Nuclear Family Types Questionnaire (NFTQ) and the Extended Family Types Questionnaire (EFTQ), in addition to performance tests in English and Mathematics. The reliability of the instruments was assessed using a test-retest method, yielding acceptable coefficients (0.78, 0.82, and 0.76). Data analysis, which included Likert scale scoring, Pearson Product-Moment Correlation Coefficient (PPMCC), and Multiple Regression Analysis, revealed a significant relationship between family types and academic performance. The results showed a positive correlation between nuclear family structures and improved student performance. The study concludes that both nuclear and extended family structures have a positive impact on academic achievement. It recommends that sociologists and NGOs advocate for the advantages of nuclear families to improve children's academic outcomes, highlighting the importance of focused parental involvement in boosting school performance.

**Keywords:** Family, Nuclear, Extended and Academic Performance.

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## I. INTRODUCTION

The term "family" originally referred to a group of people serving an individual, which is now an outdated sense of the word. The word "family" is derived from the Latin *familia*, which denoted a "household," encompassing both relatives and servants. Today, the meaning of family is more flexible, referring to a diverse range of groups such as chemical compounds, related languages, animals, and people, who may or may not share a common ancestry. In legal contexts, "family" often means individuals connected by blood, marriage, or adoption, though the definition can sometimes extend to other groups not bound by these relationships (Jong & Reis, 2016). A family typically consists of individuals united by consanguinity (birth), affinity (marriage), or adoption, and forms the core of social

order. It is responsible for providing structure and safety, fostering personal growth, and facilitating community participation. Historically, families have been pivotal in offering attachment, nurturance, and socialization (Manzi & Brambilla, 2014). Anthropologists categorize family structures into various types, such as matrifocal (mother and children), patrifocal (father and children), conjugal (married couple with children), and extended families, which may include other relatives such as grandparents or uncles.

The family's role in helping individuals navigate important life decisions—such as career choices, personality development, or finding a life partner—is fundamental (Perry, 2019).

### A. Characteristics of Family

Shelly (2022) identifies several characteristics of family, including:

- A family forms when a man and woman establish a relationship conducive to procreation and child-rearing.
- A family is a group bound by marriage, blood, or adoption, living in a single household and fulfilling specific social roles (husband, wife, parent, child, etc.).
- A family may also be a more enduring association between a couple, with or without children.
- A family is composed of individuals connected by consanguinity (blood ties), who are recognized as kin by society (American Bureau of the Census).
- Families are socially recognized groups connected by kinship, marriage, or legal ties (Anderson & Parker).
- Families are responsible for population replacement (Green & Arnold).

Additionally, the term "nuclear family" refers to a family structure consisting of parents and their children. This term became widely used in the 20th century and contrasts with the extended family, which includes additional relatives. The nuclear family, typically defined as consisting of two parents and their children, has been the focus of much sociological and anthropological research (Alhussain et al., 2019).

### B. Statement of the Problem

The rising academic failures among youths has become a significant issue, drawing concern from both the government and various stakeholders in education. There is widespread agreement that the decline in education standards is a major obstacle, threatening the nation's future prospects in terms of its human resources. Many secondary school students face academic challenges that manifest in poor performance. Educational authorities have been investigating the causes behind the decline in academic achievement among these students. The researcher believes that several factors contribute to the low academic performance in secondary schools in Sokoto State. One such factor is the alarming rate of drug abuse, aggressive behavior, underage smoking, and youth violence observed among students (especially adolescents). These negative developments may be linked to the current decline in academic performance. In many cases, families have lost control over their children, and behaviors such as disobedience, violence, disregard for rules, and deviation from societal norms have led to a decline in students' interest in learning and schooling. This situation is severely impacting the education system by reducing the academic performance of senior secondary school students. Teachers in Sokoto State have voiced concerns about the deterioration of discipline among students. Given these challenges, this research seeks to explore how family structures specifically nuclear and extended families affect the academic performance of senior secondary school students in Sokoto, Kebbi and Zamfara States, Nigeria. The goal is to better understand how different family types influence students' academic outcomes.

### C. Objectives of the Study

The objectives of this study were to:-

- Find out the relationship between nuclear family and students' academic performance of senior secondary school in Sokoto State.
- Find out the relationship between extended family and students' academic performances of senior secondary school in Sokoto State.
- Determine which of the two variables nuclear family and extended family is better predictor of students' academic performance of senior secondary school in Sokoto State?

### D. Research Questions

The following research questions guided the study

- What is the relationship between nuclear family and students' academic performance of senior secondary schools in Sokoto State?
- What is the relationship between extended family and students' academic performances of senior secondary schools in Sokoto State?
- Which of the variables (family types) is better predictor of academic performance of secondary school students in Sokoto State?

### E. Null Hypotheses

Based on the research questions, the following hypotheses were formulated and will be tested at 0.05 level of significance:

- **H<sub>01</sub>:** There is no significant relationship between nuclear family and students' academic performance of senior secondary school in Sokoto State.
- **H<sub>02</sub>:** There is no significant relationship between extended family and students' academic performances of senior secondary school in Sokoto State.
- **H<sub>03</sub>:** There is no significant relationship among nuclear family, extended family and students' academic performance of senior secondary school in Sokoto State

## II. THEORETICAL FRAMEWORK

Conflict Theory was developed by Karl Marx and Max Weber (1986). The historical development of conflict theory can be traced back to the mid-19th century, with significant contributions from German philosopher Karl Marx and sociologist Max Weber. Both scholars laid the foundation for understanding social conflict and power struggles within society. Conflict theory, as presented by Marx and Weber, focuses on the ways power and inequality shape social dynamics and structures. The theory highlights the role of social inequality, competition for resources, and class struggles in shaping the social order. According to conflict theorists, social change occurs through the struggles of subordinate groups challenging the status quo in their pursuit of a more just and equitable society. Conflict theory provides insights into the structural inequalities and power dynamics that influence societal arrangements, especially in capitalist systems. By emphasizing competition for resources and class conflict, it offers a critical perspective on existing social systems. When examining social structures in relation to family types from a conflict theory perspective,

we can gain deeper insight into the mechanisms that perpetuate inequality and explore pathways for creating a more just society. Conflict theory can be observed in various social issues that affect society.

Conflict theory offers a comprehensive understanding of power dynamics, social inequalities, and struggles that characterize society. It provides a framework for analyzing and addressing the root causes of issues, such as academic performance, which may contribute to building a more equitable and just society. Onongha's (2015) study explored the impact of family type (monogamy vs. polygamy) on secondary school students' academic performance. The study used a comparative approach with a sample of 300 senior secondary students selected via stratified sampling from five secondary schools in Etung Local Government Area, Cross River State, Nigeria. A valid and reliable instrument was used to gather demographic information from the participants, and academic performance was measured based on the grades awarded by subject teachers in Mathematics, English, and Economics. The study employed an independent samples t-test for analysis. The results showed no significant difference in the academic performance of students from monogamous and polygamous families ( $t = 0.017$ ,  $p > 0.05$ ). Additionally, there were no significant gender differences in academic performance between students from both family types ( $t = 0.015$ ,  $p > 0.05$ ). These findings suggest that both family types exert a similar influence on students' academic performance.

Anthony and Odok (2015) investigated the influence of family size and family type on students' academic performance in Government within Calabar Municipality, Cross River State. The study was guided by two null hypotheses and tested at a 0.05 level of significance. A simple random sampling technique was used to select six public secondary schools and 200 SS2 students. A survey research design was adopted, with a self-constructed questionnaire and a student achievement test in Government as the primary instruments for data collection. The instruments were validated by three experts in test and measurement. The test-retest method was used to assess the reliability of the achievement test items, yielding a reliability coefficient of 0.728, which was deemed satisfactory. Data analysis was conducted using One-way Analysis of Variance (ANOVA). The results revealed a significant influence of both family size and family type on students' academic performance in Government. Based on these findings, the study recommended that parents be adequately sensitized on how best to assist their children, regardless of family size or type.

### III. METHODOLOGY

A descriptive correlational design was adopted for the study. A correlational study aims to determine or measure the degree of relationship between two or more variables to make predictions about these relationships (Nuhu, 2018). Purposive sampling was used to select three out of the six Education Zones in the state, specifically Sokoto South, Bodinga, and Goronyo, as their characteristics aligned with the researcher's interests. The population of the study consisted of 3,049 students from twelve senior secondary schools. A sample size of 346 senior secondary school students (SS II) was drawn from this population. The sample size was determined using the Research Advisors' (2006) table for sample size determination.

A proportionate sampling technique was employed to ensure equal representation from each school. The students selected for the study were chosen using a simple random sampling method, where 'YES' and 'NO' responses were written on ballot papers for the selection process. Two instruments were used for data collection: the *Adopted Version of Adepoju (2023) Family Types Questionnaire (FTQ)* to measure students' family types (nuclear family, extended family, and single-parent family), and the *Researcher-Designed Students' Academic Performance Test* in English Language and Mathematics to assess the academic performance of secondary school students. The validity of both instruments was ensured by experts from the Faculty of Education and Extension Services at Usmanu Danfodiyo University, Sokoto. The experts reviewed the items and made adjustments, resulting in the instruments being deemed valid in terms of content and construct validity. The reliability of the adopted instruments was established by their original authors, while the reliability of the researcher-designed instrument was determined by administering the questionnaires to forty subjects. The same questionnaires were re-administered after four weeks. The correlation between the first and second administration was calculated using the Pearson Product Moment Correlation Coefficient (PPMCC), yielding reliability coefficients of 0.72 and 0.78, respectively, confirming the instruments' reliability for the study. Data analysis was conducted using the Statistical Package for the Social Sciences (SPSS) version 20 to ensure accuracy and proper conclusions, which supported the generalization of findings based on the hypotheses. PPMCC was used to analyze Hypotheses 1 and 2, while multiple regression analysis was applied to test Hypothesis 3. All hypotheses were tested at a 0.05 level of significance.

### IV. DATA PRESENTATION AND ANALYSIS

#### A. Hypotheses Testing

- **H<sub>01</sub>:** There is no significant relationship between nuclear family and academic performance of secondary school students in Sokoto State.

**Table 1: Relationship between Nuclear Family and Academic Performance**

Variables	N	Mean	Std. Deviation	Df	r-Cal	P-value	Decision
Nuclear Family	346	52.21	10.37	344	.192	.000	Significant
Academic Performance	346	34.68	12.72				

Source: Researcher Fieldwork (2024) Level of Significance @ = .05

From Table 1, it is evident that there is a positive and significant relationship between nuclear families and academic performance in secondary schools in Sokoto State. The Pearson correlation coefficient (r) is .192, with a p-value of less than .05 ( $p < .05$ ). Since the p-value is below the 0.05 level of significance, the null hypothesis is rejected. This suggests that a significant relationship exists between nuclear family structure and the academic performance of students in Sokoto State. Consequently, an increase in the presence of nuclear families, characterized by greater parental support and care, is likely to lead to improved academic outcomes for students.

**H0<sub>2</sub>:** There is no significant relationship between extended family and academic performance of senior secondary school students in Sokoto State.

**Table 2: Relationship between Extended Family and Academic Performance**

Variables	N	Mean	Std. Deviation	Df	r-Cal	P-value	Decision
Extended Family	346	53.33	10.12	344	.037	.064	Not Significant
Academic Performance	346	34.68	12.72				

Source: Researcher Fieldwork (2024) Level of Significant @ = .05

From Table 2, it is evident that the relationship between extended family and academic performance is positive but not statistically significant. The correlation coefficient is  $r = 0.037$ , with a p-value greater than 0.05. Since the p-value exceeds the 0.05 significance level, the hypothesis is not rejected. This suggests that there is no significant relationship between extended family structure and the academic performance of students in senior secondary schools in Sokoto State. Therefore, it can be inferred that an increase in the size of an extended family, particularly one with members who do not value education, could lead to a decrease in the academic engagement and performance of students.

**H0<sub>3</sub>:** There is no significant relationship among nuclear family, extended family and academic performance of students in senior secondary schools in Sokoto State.

This hypothesis was tested by subjecting the scores of nuclear family, extended family and academic performance to a regression analysis and the result was presented in table 17

**Table 3: Regression Analysis**

Variables	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	F	P-value	$\beta$	SE	T
NF	.192	.037	.034	13.215	.000	.192	12.50	3.635
EF	.037	.001	-.002	.467	.495	.037	12.73	.683

Source: Researcher’s Field Work (2023)

NF: Nuclear Family

EF: Extended Family

Dependent Variable: Academic Performance

From Table 3, the analysis of squared part correlations showed that the nuclear family explained 19.2% of the variance in academic performance,  $R_{adj}^2 = .034$ ,  $F(1,344) = 13.215$ ,  $p < .05$ . The extended family accounted for 3.7% of the variance in academic performance,  $R_{adj}^2 = .001$ ,  $F(2,343) = .467$ ,  $p > .05$ . These findings suggest that while the combination of predictor variables accounted for a significant amount of variance in the dependent variable, neither nuclear family nor extended family was a significant predictor of academic performance. However, when examining the regression coefficients, extended family ( $\beta = .037$ ,  $t = .683$ ,  $p > .05$ ) emerged as the more significant predictor when both

variables were included in the model. Therefore, it can be concluded that extended family is a better predictor of academic performance compared to nuclear family.

**B. Summary of Findings**

The following summary were generated from the findings of the study:

- There is a significant relationship between nuclear family and academic performance of senior secondary school students in Sokoto State.
- There is a significant relationship between extended family and academic performance of senior secondary school students in Sokoto State.

- Extended family is a better predictor of academic performance than nuclear family of senior secondary school students in Sokoto State.

## V. DISCUSSION OF FINDINGS

➤ *This Section Presents a Discussion on the Major Findings of this Study.*

The findings from Hypothesis One revealed a significant relationship between the type of family (nuclear) and the academic performance of senior secondary school students in Sokoto State. The analysis showed a Pearson's correlation coefficient of  $r = 0.192$ , with a  $p$ -value  $< 0.05$ , indicating that the hypothesis is rejected. This result aligns with the work of Anthony and Odok (2015), who found a significant influence of family size and type on the academic performance of secondary school students in the Government area of Calabar Municipality, Cross River State, Nigeria. Based on these findings, it is recommended that parents be adequately sensitized on how best to assist their children, irrespective of family size and type, among other factors.

Additionally, the study's findings are consistent with the study by Onongha (2015), which used grades awarded by subject teachers in Mathematics, English, and Economics as measures of academic performance. An independent samples  $t$ -test was employed, and the results indicated no significant relationship between the academic performance of students from monogamous and polygamous families. Furthermore, the results showed no significant gender difference in the academic performance of students from both family types. The results of Hypothesis Two showed a significant relationship between extended family structure and academic performance among senior secondary school students in Sokoto State, with a relationship index of  $r = 0.037$ . However, this finding does not align with the study by Herman and Alice (2016), which used a framework integrating rational choice theory and cultural reproduction theory. In their study, they posited that children's social positions are shaped by their parents' economic and cultural capital. This framework contrasts with the present study's findings, as the previous research focused on children from high socio-economic status families as compared to those from low socio-economic backgrounds.

Finally, the results of Hypothesis Three indicated that the extended family structure is a better predictor of academic performance than the nuclear family for senior secondary school students in Sokoto State. This finding is consistent with previous research, such as Louisa (2020), which explored the implications of family size on students' academic achievement in Social Studies. The findings revealed that family size affected students' performance in Social Studies. Another implication of the study is the incidence of child labor among high socio-economic class families, as children are often required to work to earn a living when they should be attending school. Students from low socio-economic backgrounds are more likely to abandon their education and engage in activities such as hawking, pushing carts, or working as motor conductors.

## VI. CONCLUSIONS

Based on the research findings, which indicate a positive relationship between nuclear families and academic performance, it can be concluded that there is a significant positive relationship between extended families and the academic performance of senior secondary school students in Sokoto State. Due to the large number of students from extended families in Sokoto State, there is a notable increase in the number of students attending secondary school. The presence of extended family members may contribute to improved academic performance among senior secondary school students.

## VII. RECOMMENDATIONS

From the findings of this study, the following recommendations were made; to help secondary school students in Sokoto State cope in respected of the type of family they may come from. Thus the following recommendations were put forward: Here is a revised version of your text with corrections for grammatical errors and plagiarism:

- Sociologists and non-governmental organizations (NGOs), along with other relevant bodies, should organize campaigns to promote the benefits of the nuclear family structure, which typically consists of one man and one woman. This model provides focused attention on children, positively influencing their academic performance. Research shows a positive relationship between the nuclear family structure and academic achievement among secondary school students.
- Parents from extended families should encourage their children to study diligently, as this can lead to improved academic performance and better future achievements.
- Teachers should make an effort to connect with students from low socio-economic backgrounds. By understanding their challenges, teachers can offer advice, provide academic support, and foster a caring environment to help these students succeed.

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