

# Large Family Size as a Factor of Academic Performance among Senior Secondary School Students in Sokoto Metropolis: Implication for Counselling

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DOI: https://dx.doi.org/10.47772/IJRISS.2023.71040

## Received: 31 August 2023; Revised: 15 September 2023; Accepted: 19 September 2023; Published: 19 October 2023

# ABSTRACT

The study investigates family size as correlate of academic performance among senior secondary school students in Sokoto metropolis using correlational research design. The population of the study comprised of 8,185 students. The study uses a sample of 365 SS I students. Two research instruments; Family Size Questionnaire (FSQ) and Academic Performance Test in English (APTIE) and Mathematics (APTIM) are used for data collection. Two hypotheses were formulated and tested. Also, Pearson Product Moment Correlation Coefficient was used to test the hypotheses. The findings reveal positive significant relationship between family size and academic performance. It concludes that family size is a determinant of students' academic performance. The study therefore recommends that parents should try to keep a family that their socio-economic status can maintain.

Keywords: Family size, gender, school, students, academic performance

# INTRODUCTION

The development of any nation or community depends largely on the quality of education attained by its citizens and it is believed that the basis of any true development must commence with the development of human resources. Thus, in line with the Adeoye's (2000) view that one of the most serious problems facing developing countries is the problem of human resource development, similarly, Nduaya (2008) associates the problem of human resources with that of education. The priority which Nigeria, like most other developing countries, gives to education as a major development plans. The development plans include the goal of building a free and democratic society, a just and egalitarian society, a united and self-reliant nation, a great and dynamic economy, and a land of bright and full opportunities for all citizens (Federal Republic of Nigeria, 2013).

Family size refers to the total number of children in the child's family in addition to the child himself. As pointed out by Joseph (2009) that family size in this context, refers to the total number of children in the child's family in addition to the child himself, while the birth order refers to the child's position in the birth order. He added that it is equally common among professional and managerial fathers of the top of the occupational hierarchy, although to unskilled workers polygamous is prominent. It is important to note that either of the family type (monogamous or polygamous) family dictates the size of the family. Accordingly, Gottfried, Fleming and Gottfried (2004) noted that monogamous family is common among well-educated families as well as among poorly-educated families. However, the family type that a child comes from either monogamous or polygamous has been noted to usually has impact on the child's academic performance and thus, noted that children from larger families are found to do worse than children from smaller families because a small sized family enjoys time, love, attention and financial support of parents (Joseph, 2009).



Furthermore, Seigal (2007) confirmed that children from large families have lower academic performance due to lack of adequate parental care, love, attention and financial resources to cater for the children's needs.

The study by Azumah, Adjei, Nachinaab and Nachinaab (2017) examined family size and its effects on the investment of child's education in Atonsu-Bokro, Ghana. Specific issues that were critically reviewed included, among other things, the influences of large family size on school enrolment, the effect of family size on students' academic performance and whether family size affects child's educational attainment. Findings reveal that children from large families mostly enroll late in school, perform poorly and leave school early as compared to those from small-sized families. The results further revealed that financial problem, lack of parental attention and poor heath as the main causes of the negative effect. In the same vein, Akinleke (2017) examined the impact of family size on the academic performance of 220 secondary school students in Yewa Local Government Area of Ogun State, Nigeria and the results revealed a significant relationship between family size and academic performance of secondary school students. Similarly, Ella, Odok and Ella (2015) study that examined influence of family size and family type on academic performance of students in public government secondary schools in Calabar Municipality, revealed a significant relationship between family size and academic performance of secondary school students. Likewise, the study by Chandra and Azimuddin (2013) on the influence of different categories of SES of students on their academic performance reveals a positive correlation between SES and academic performance. In a related development, Mohammed (2008) while trying to find the probable cause of poor academic performance of students in one of the Grammar schools in London, observes that family size contributes to low educational standard of students. Illiteracy level and economic status of parents have been found to be some of the reasons for parents' inability to make sufficient positive contributions to the education or their wards.

However, on the contrary, Gabriel (2013) study that examined the influence of family size on the academic performance of secondary school students as perceived by teachers and parents; revealed no significant relationship in family size and students' academic performance. Likewise, Cobb-Clark and Moschion (2013) investigation on the impact of family size on school academic performance using data on national test scores across multiple subjects as well as subjective assessments of pupils' performance provided by teachers and parents, revealed a meaningful negative impact of family size on students' academic performance.

Moreover, it should be noted that gender is among the factors mentioned in literature to have considerable effects on students' academic performances. Gender is the range of physical, biological, mental and behavioural characteristics pertaining to and differentiating between the female and male students. The importance of examining performance in relation to gender is based primarily on the socio-cultural differences between girls and boys. Some vocations and professions in Nigeria have been regarded as men's (engineering, arts and crafts, agriculture etc.), while others as women's (catering, typing, nursing etc.). In fact, parents assign tasks like car washing, grass cutting, bulbs fixing, climbing ladders to fix or remove things etc. to boys. On the other hand, chores like dish washing, cooking, cleaning and so on are assigned to girls. In a nutshell, what are regarded as complex and difficult tasks are allocated to boys whereas girls are expected to handle the relatively easy and less demanding tasks. As a result of this way of thinking, the society at large has tended to see girls as a weaker sex". Consequently, an average Nigerian girl goes to school with these fixed stereotypes.

Furthermore, Okeke (2009) affirmed that the proportion of girls in science classes in secondary and tertiary institutions or in employment as scientist, engineers, and technologists in Nigeria is quiet low. In line with the above claim, Akpochafo (2009) reported that in Nigeria as in many African societies, there is gender bias; a situation in which cultural beliefs and structural arrangement favour men over women. This can be witnessed in most elective positions contestable by men and women. People always see women as not fit to



govern or rule since men are involved. The idea that women should be under and submissive to men has created negative influence in the life of the women folk. Explaining further, Anele (2008) is of the view that the socio-cultural practices of African societies have placed men on the position, which give them domineering influence over the women folk. In an argument for an attempt to debunk the belief that seems general in Africa to create a kind of relief for gender equality, Okoye (2009) argued that because of various biological differences in human make-up such as those between male and female, people assume that one sex may have a learning edge over the other. Intrinsically, there is practically no significant difference in intelligence between students that can be traceable to gender difference. He argued that, the fact that men are regarded as the dominant and even superior sex does not mean that they are artistically better than women. Therefore, gender differences in intellectual abilities can be as a result of gender role stereotyping. Gender differences in academic performance cannot therefore be assumed to be due to inherent biological differences between the genders even if they exist.

The study was hinged upon the conflict theory originating from the work of Karl Marx (Omer & Jabeen, 2016) which focuses on the causes and consequences of class conflict between the bourgeoisie (the owners of the means of production and the capitalists) and the proletariat (the working class and the poor). Focusing on the economic, social, and political implications of the rise of capitalism in, Marx theorized that this system, premised on the existence of a powerful minority class (the bourgeoisie) and an oppressed majority class (the proletariat), created class conflict because the interests of the two were at odds, and resources were unjustly distributed among them. Within this system an unequal social order was maintained through ideological coercion which created consensus and acceptance of the values, expectations, and conditions as determined by the bourgeoisie. Marx theorized that the work of producing consensus was done in the "superstructure" of society, which is composed of social institutions, political structures, and culture, and what it produced consensus for was the "base," the economic relations of production.

#### **Statement of the Problem**

Poor academic performance of students has been of great concern to educationists, counseling professionals in particular. Despite all the guidance programmes and counseling strategies mounted in schools to improve students' academic performance, poor results are still recorded yearly in Sokoto metropolis. Hence, the necessity to find out the cause of such poor performances. Poor academic performance of students in the Senior Secondary School Certificate Examination in Sokoto metropolis was evidently on the increase in WAEC, to be precise. The percentage failure recorded in the Senior Secondary School Examination in Sokoto North and Sokoto South local government areas increased from 35% to 40% between 2015/16 and 2017/18 academic sessions (State Ministry of Basic and Secondary Education, 2018). It was noted that children from small-sized families do perform better in school because their parents can easily provide most of their needs. Such children hardly lack anything in terms of feeding, clothing, financing and provision of textbooks and other learning materials. Similarly, parents with large family but with high socio-economic status can finance the education of their children with ease. On the other hand, lack of financial capability due to low socio-economic status of parents could lead to poor academic performance by children from even small families because of the absence of basic learning requirements.

## **Objectives of the Study**

The purpose of this study is to investigate family size as correlate of academic performance among senior secondary school students in Sokoto metropolis. Specifically, the study intended to:

- 1. Find out the relationship between family size and academic performance of senior secondary school students.
- 2. Examine the difference in the academic performance of male and female students from large-sized families.



## **Formulated Hypotheses**

The following hypotheses were tested at 0.05 level of significance:

- 1. There is no significant relationship between family size and academic performance of senior secondary school students in Sokoto metropolis.
- 2. There is no significant difference in the academic performance of male and female students from large-sized families.

# METHODOLOGY

The research design used for the study was correlation survey method. Salawu and Abubakar (2014) is of the opinion that correlation survey study can be used to know if a relationship actually exists between variables but do not indicate their causation. This explains the use of the correlation design in this study.

The population of all the senior secondary schools in Sokoto metropolis are covered during the cause of this work. In all, there are a total number of 8,185 students spread across 26 senior secondary schools (Ministry for Basic and Secondary Education, 2018). The sample size used for the study was 365 students selected from 6 of the 26 schools. The sample size was arrived at using Research Advisors' (2006) table for determining sample size from a given population. Two instruments; Family Size Questionnaire (FSQ) and Academic Performance Tests in English and Mathematics (APTE&M) were used to gather data for the study. The Family Size Questionnaire (FSQ) was designed by the researchers having two sections; Section A consists of respondents' bio data, while Section B consists of Twenty (20) items on a 4-Likert-Scale which seeks information from respondents about family size and socio-economic status. The measure of the students' academic performance for this study was the total scores obtained in English and Mathematics tests administered to the students by the researchers. The researchers had designed the English and Mathematics tests, containing 20 items each, selected from past examination questions of the West African Examination Council (WAEC) and National Examination Council (NECO) in English and Mathematics. The researchers with the assistance of some teachers in the schools from which the data collected was analyzed.

For the first hypothesis, Pearson Product Moment Correlation Coefficient was used to determine whether there exists correlation between the variables, while the independent samples t-test technique was used to analyze the other hypothesis that sought to determine differences in the variables.

## RESULTS

**Hypothesis 1:** There is no significant relationship between family size and academic performance of senior secondary school students in Sokoto metropolis?

**Table 1:** Correlation analysis between family size and academic performance of senior secondary school students in Sokoto metropolis

Variables	Ν	Mean	Std. Deviation	r-Cal	p-Value	Decision
Family Size	365	48.10	15.343	.032	.542	H <sub>0</sub> Accepted
Academic Performance	365	50.579	15.1702			

#### Source: Research Field Work, 2023

From the result of table 1, family size and academic performance though positively related was non-



significant, Pearson's r(363) = .032, p > .05. This indicates no significant relationship between family size and academic performance because the p-value is more than the .05 level of significance. Hence, the hypothesis is retained. This implies that there is no significant relationship between family size and academic performance of secondary school students in Sokoto Metropolis.

**Hypothesis 2:** There is no significant difference in the academic performance of male and female students from large-sized families.

**Table 2:** Difference between male and female students' academic performance of senior secondary school students from large-sized families

Variables	Ν	Mean	Std. Deviation	t-Cal	p-Value	Decision
Male	154	52.224	17.2959	1 775	0.001	H <sub>0</sub> Rejected
Female	211	49.379	13.3237	1.775		

## Source: Research Field Work, 2023

Table 2 shows a t-test indicating that scores were significantly higher for the males (M = 52.224, SD = 17.3) than for the females (M = 49.38, SD = 13.3), t (364) = 1.775, p < .001. Though this indicates that there was gender difference in the academic performance of the students, this indicates a significant difference in the academic performance. Hence, the hypothesis is rejected. This implies that there is significant difference in the academic performance of male and female students from large-sized families.

# **DISCUSSION OF FINDINGS**

Hypothesis one revealed that there is no significant relationship between family size and academic performance among senior secondary school students in Sokoto metropolis. This is corroborated with the outcome of the study conducted by Gabriel (2013) that revealed no significant relationship in family size and students' academic performance. However, this outcome is contrary to the outcome of the study by Cobb-Clark and Moschion (2013) which revealed a meaningful negative impact of family size on students' academic performance. Likewise, of the separate studies conducted by Ella, Odok and Ella (2015) and Akinleke (2017) that also revealed a significant relationship between family size and academic performance of secondary school students. Consequently, Azumah, Adjei, Nachinaab and Nachinaab (2017)'s maintained that financial problem, lack of parental attention and poor heath as the main causes of the negative effect. This may well be reasons why studies like that of Odok (2013) and Eamon (2005) argue that siblings from larger families are found to do worse in academics than children from smaller families. The reason is that parents with many children cannot afford sufficient time with their children. On the other hand, parents with few children can afford sufficient time for their children's academic endeavors.

Hypothesis two, however, revealed significant difference between male and female students' academic performance among senior secondary school students in Sokoto metropolis. This outcome is corroborated by the study conducted by Nnamani and Oyibe (2016), which revealed significant difference between male and female students' academic performance in secondary schools. However, contrary to the present outcome is the result of a study conducted by Subuola (2015) which revealed no significant relationship between male and female students academic performance.

# CONCLUSION

The study concludes that the large size of a family is an instrumental factor that affects students' academic



performance. Similarly, because male students performed better than their female counterparts the study, it accordingly reveals difference in the academic performance of students from large-sized families.

# RECOMMENDATIONS

Based on the findings of the study, the following recommendations are made;

- 1. Large families should strive to encourage and shoulder educational responsibilities of their children; in this regard, they may have an advantage of pooling resources together to take such responsibility. Likewise, all members should help in whatever way possible to help out in easing readings and assignments
- 2. Since in the area of study, parents and teachers give more opportunity to education of the male child, it is recommended that, such also should be extended to the girl-child; there should be no bias against them. This is view to understanding that the girl-child, given all the needed support and encouragement, the girl-child could excel too and could become a positive contributor to the development of the society too.

#### **Implication for Counselling**

Because counselling touch all aspects of life in the society and as such is found very relevant, helpful and of utmost importance to the school process; thus, school guidance process is of importance to both the students and the staff; and also plays important role in school-parent-community relationships (Aliero, Aliero & Tsagem, 2022). Issues of family size, socio-economic status and gender should be of great concern to society at large for proper understanding. On the key notes, these variables play important roles in promoting quality education. Therefore, counselors need to get parents acquainted with the concepts of family size, socio-economic status and employ various counselling expertise they can in resolving students' challenges. With this knowledge also, counsellors can employ skills and therapeutic strategies to help both parents and the students overcome their academic challenges. To do this, counsellors should partner with parents, community, the government and non-governmental agencies to initiate programmes that will assist parents to keep moderate families that they can, economically and socially, easily cater for and this may prove vital in ensuring that their children improve the desired academic performances.

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