

## **Parental Factors as Predictor of Pupils Academic Achievement in Mathematics among Public Primary Schools in Ogun State**

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### **Abstract**

*The goal of provided educational opportunities to learners was to ensure that they have opportunity to succeed both as as students and member of the larger community they belonged. Mathematics performance of a student at school does not depend on attributes like mental and physical capability alone, but other factors such as family factor must also be put into consideration, because of the tendency of influencing the performance of pupils in school subject including Mathematics worldwide. The study investigated on how family factors could predict Mathematics performance of pupils in primary schools in Ogun State. The study adopted a descriptive survey research design. While sample was selected, using purposive sampling technique to select the sixty six (66) participants. Three research questions were posted for the study. Data were collected through a structured questionnaire and analysed using Regression analysis at a 0.05 level of significance, the findings revealed that parents factors (level of literacy,*

*parental occupation and parental income) can predict ( $F_{3,96}=1.457$ ;  $p<0.05$ ) pupils academic achievement in Mathematics in the study area. Based on the findings, it is therefore recommended that parents should be made aware of the heavy influence of how they treat their children in terms of the parenting style adopted. Parents should also be encouraged to strive hard in making available the necessary materials needed for their children's education especially in Mathematics.*

**Keywords:** Parents' socio-economic status, parents' educational qualification, family type, family size, Mathematics performance.

**Word Count: 223**

### **Introduction**

Education ensures that individual has wider knowledge about the world at large. The experiences of an individual that lead to the acquisition of knowledge and intellectual enlightenment were what make education unique. Education is meaningful when successfully transmitted from one generation to the other. The importance of family factors in shaping mathematics performance of pupils cannot be underestimated because the people the child interacts with at the early stage of life can provide the motivating factor to the education progress made especially around the home. It is a fact that learning Mathematics among pupils is important. This can be observed in the requirement of mathematics as core subject in both primary and secondary school. Promotion of pupils to the next class at the end of every session is based majorly on their performance in Mathematics. Improvement in Mathematics achievement of pupils at any level of learning is not just an indication that teachers are efficient in their responsibility in moulding the child but will help in the determination of the child's ability to live independently as individual and contribute to the nation in general. The importance of teaching mathematics in self-enlightening process of pupils cannot be

overstated. This is important to the development of the pupil and community who are provided the required learning experience that will be useful for the chosen career by enhancing success because the pupil is enlightened, character is developed and the foundation for a better nation is laid through learning of Mathematics.

The family is the first social environment the child finds itself. According to Clifford (2000), family remains the primary environment of the child. The author emphasized that family environment has more chances of increasing or decreasing the intellectual achievement of the child. Akubue and Okolo (2018), defined family as a small kinship structure group with the key function of natural socialization of the new born. Family is defined as a primary social group of parents, offspring and possibly other members of the household. Family background refers to all the conditions and circumstances in the family which influence the child, physically, intellectually, and emotionally. Children coming from different family backgrounds are affected different by such family condition that is why some children have good family background while some have poor background. Eke (2000) noted that with some families, the background way vary from time to time for the same individuals. Family size refers to the total number of children in a child's family in addition to the child himself. Large numbered families, whether rich or poor are difficult to maintain, they are characterized with a high number of children, rowdiness and this does not create convenience for learning. This is because psychological problems are potential sources of trouble with learning. It is therefore against these background that this study determined family factors as predictor of Mathematics performance among pupils with intellectual disability in Ibadan.

Formal education remains the vehicle for human development which must start from the family. There are different categories of families. Traditional families-where the father is the major breadwinner and mother at home rearing children; divorced families-families that have been reconstituted following the breaking of marriage; single parent

families-likely headed by women; step families-with new siblings and new parents stemming from re-marriage. A family could also be categorized as extended or nuclear. Extended families are those in which large group of related kin in addition to parents and children live together in the same household. This is the type of families prevalent in Nigeria. Nuclear families are families where married couple resides together with their children. Families are of various sizes. Family size has to do with the total number of people in a single family, which may include the father, mother children and even the extended members-all living in one hamlet. According to Alio (2005), family size has implication for education. The author emphasized that the size of the family determines to a great extent the relative amount of physical attention and time which each child gets from his parents. Large families may suffer poverty and lack parental encouragement and stimulus which motivate their academic achievement. Similarly, smaller family size has been linked with high academic achievement (Majoribank 2021). Majoribank stressed that students with fewer siblings are likely to receive more parental attention and have support that leads to better school performance. She maintained that bright children from under-privileged family environment may turn dull due to impoverished family environment. She added that mental development influence, intellectual development of children cannot be attained without adequate motivation from the family environmental development because the child cannot do well intellectually. The implication is that a proper stimulating family environment with intellectual potential and appropriate teaching methods will definitely enhance maximum performance of the child.

Durosaro and Durosaro (2020), in their study investigated the relationship between students' family size and their academic achievement; they found out that family size influenced academic achievement. Their study reveals that children from small size families performed better at school than their counterparts from both average size and large size families. Furthermore, Yoloeye (2009) conducted a

study to see if the family background variables might be useful in explaining their academic achievement. Some aspects of family background variables examined in the study include family size which were naturally large, reduces the chances of children going to school in the first instance. Thirdly, parents of such families are mostly illiterate and incapable of providing adequate motivation for their children in schools as compare with the literate nuclear families.

Parental occupation is also an important family background variable. The occupation of one's parents may determine to a large extent one's opportunity to attend secondary school or not. He noted that, parents like their children to take to their occupation, like parents who are lawyers, doctors, musicians among others. Examples of such people in the country-include the late Gani Fawehinmi, the prominent human right lawyer, who were famous musicians each of these great men had one or more of his children whose parents are farmers or craftsmen. In Nigeria, most children whose parents cannot afford to pay for high cost of formal education enroll into apprenticeship programmes such as carpentry, bricklaying, petty trading and others. In the study area, there is a seeming general poor performance among secondary school students. Evidences of the poor performances are seen in the results of both students' that took the internal and external examinations.

Different family factors will affect Mathematics performance of pupils in different ways irrespective of the method use in teaching the children and other factors in the school. Eke (2020), averred that some families factors may differ in the way Mathematics performance of the child is influenced over a period of time. The implication is that there are factors outside the child learning environment that can predict mathematics performance of pupils.

Some of family factors that will influence the Mathematics performance of pupils with intellectual disability includes environment of the family, family size, parents' educational qualification and family type.

The family environment and the type of interaction provided according to Emeke (2020) may influence the Mathematics performance of the child either positively or negatively. In every society the family is view as social unit that is responsible for providing stimulation and experiences required in the development of the child who is also a member of the family. The parents, siblings and things in the child's immediate environment are seen as significantly related to the ability to process information which are important in promoting or diminishing the self-worth and performance attainment of the child.

The family, being a powerful influence on the child and its importance as a primary agent of socialization could in no doubt enhance or hinder the academic achievement of the child depending on the social climate in the family. Variance in psycho-social emotional fortification in the family background could be an indicator to high or low academic performance of students, bearing in mind the intervening effect of high and low socio-economic status and emotional stability of students which is a pre-requisite to academic achievement. There is documented evidence of influence of family size on students' academic performance in various subjects.

### **Statement of the Problem**

Education generally, is a continuous process of enculturation, which begins from cradle (birth) and ends in grave. The type of education one receives determines his future potentials. Parents and guardians are ill-feeling about the harming rate of poor academic performance of students in school nowadays. What they do eventually is to call the teachers to question the pupil's poor performance. Little do they know that other factors apart from teacher's abilities such as home background do influence pupil's academic performance. The home being a primary unit of socialization and where most of the children's learning take place cannot be single or left out in identifying course of poor academic performance of a child. Government, parents, teachers and students

blame one another for students' poor performance in schools. Parents blame teachers for lack of dedication to duties.

### **Aimed and Objectives of the Study**

**The study investigates the extent to which parental factors could predict pupils academic achievement in Mathematics among Public Primary Schools in Ogun State. The objectives are to:**

1. examine the influence of parental factors (literacy level, parental occupation, and parental income) on pupils' academic achievement in Mathematics in the study area.

### **Hypothesis**

H<sub>01</sub>: There will be no significant influence of parental factors (literacy level, parental occupation, and parental income) on pupils' academic achievement in mathematics in the study area

### **Method of Data Analysis**

Data were analysed using the descriptive research design such as frequency counts, percentages, mean, standard deviation, while the inferential analysis of one way Anova and t-test were used to test the hypothesise using Statistical Package for Social Science (SPSS) Version 23.0 tested at 0.05 level of significance.

### **Results**

**Table 1: Showing respondents Family Type**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Nuclear	87	87.0	87.0	87.0
	Polygamous	13	13.0	13.0	100.0
	Total	100	100.0	100.0	

Table.1 revealed that 87 (87.0%) of the respondents were from nuclear family, while 13 (13.0%) were from polygamous family.

**Table 2: showing respondents Numbers of Children**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 -4	64	64.0	64.0	64.0
5-8	29	29.0	29.0	93.0
9 above	7	7.0	7.0	100.0
<b>Total</b>	<b>100</b>	<b>100.0</b>	<b>100.0</b>	

Table 2 revealed that 64 (64.0%) of the respondents came from the family with the number of children were between 1–4, 29 (29.0%) came from the family with the number of children number between 5 – 8, while 7 (7.0%) came from the family of nine (9) numbers above.

### Testing of Hypotheses

Ho1: There will be no significant influence of parental factors (literacy level, parental occupation, and parental income) on pupils' academic achievement in Mathematics in the study area.

**Table 1: One-way ANOVA showing the influence of parental factors on pupils' academic performance**

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	144.064	3	48.021	1.457	.000
Within Groups	3164.046	96	32.959		
<b>Total</b>	<b>3308.110</b>	<b>99</b>			

Table 1 revealed a significant influence of the parental factors on the pupils' academic achievement in Mathematics in the study area ( $F_{(3,96)} =$



1.457,  $p < 0.05$ ). This implies that parental level of literacy, parental occupation and parental income can significantly predict the pupils' academic achievement in the study area, this, the null hypothesis is rejected.

### **Discussion of the Findings**

The hypothesis revealed that parental level of literacy, parental occupation and parental income can significantly predict the pupils' academic achievement. However, the findings do not agree with Hypothesis.

### **Conclusion**

Education is an important instrument of change in modern societies. Provision of adequate and relevant education is the best thing a nation can do for her citizens. This is more so, because education is a virile weapon against ignorance, disease, poverty and as a means of producing enlightened, responsible and industrious citizenry and prosperous nation.

### **Recommendations**

Based on this background, the researcher made the following recommendations:

1. Parent should support government to give their children utmost attention needed so that they could perform ultimately in their academic pursuit.
2. Students' should give serious attention to studies at home, in addition to other various works done, since the amount of effort they put in their studies influence their academic achievement.
3. Teachers should understand that teaching is a job of conscience. Teachers should handle the students as their own children; try by all means to meet the students' academic, social and psychological needs.

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