



Impact of Single Parenting on Academic Performance of Junior Secondary School Students in Mathematics

Adekola Kamil Lasisi*, Abdulhafis Adeyinka Hassan, Habibat Bolanle Abdulkareem

Faculty of Education, Al-hikmah University, Ilorin, Nigeria

Correspondence: E-mail: aklasisi@alhikmah.edu.ng

ABSTRACT

The effects of single parenting on junior secondary school student's academic performance in mathematics were examined in this study. 40 students were selected purposively, all of whom were from single and intact parenthood. Responses were analyzed at 0.05 using an independent sample t-test. The first hypothesis showed a statistically significant difference in the academic performance of students from intact and single parenting in mathematics ($t\text{-cal} = 1.82$; $P < 0.05$). Based on pre- and post-test experimental assessments, hypothesis two demonstrated a significant difference in the academic performance of the experimental group in mathematics. The result was statistically significant ($t\text{-cal} = -4.146$; $P < 0.05$). Based on pre- and post-test experimental assessments, H_{02} showed a significant difference in the academic performance of the control group in mathematics. The result was statistically significant ($t\text{-cal} = -3.444$; $P < 0.05$). The study concluded that students from single-parent homes express poor academic performance.

© 2024 Bumi Publikasi Nusantara

ARTICLE INFO

Article History:

Submitted/Received 21 Sep 2023

First Revised 01 Nov 2023

Accepted 17 Dec 2023

First Available online 18 Dec 2023

Publication Date 01 Sep 2024

Keyword:

Academic performance,
Single parenting,
Student.

1. INTRODUCTION

Although the majority of nations, if not all of them, place a high value on education due to its significance for any country's level of development, as evidenced by the way the Kwara State government invests in and spends money on education pursuits through the free, high-quality, and mandatory education program implemented in Kwara State, Nigeria. Nobody makes jokes about the advantages of education in the current system. Many of the ancient traditions and customs that have been taught and practiced for many years are now becoming outdated because of how much time has changed.

Modern culture has changed and outgrown the values and beliefs that were thought to be the core beliefs and values of our society. Even though, moralists and conservatives are experiencing disgust over the currently evolving belief and cultural systems. In actuality, things that were once deemed unacceptable are currently gaining popularity very quickly. The problem of single parenting has been a major source of concern for conservatives for decades if not centuries.

The consequences of single parenthood on children cannot be overstated, yet single parenting is already one of society's fastest-growing trends. A single parent is usually considered the primary caregiver. The primary caregiver is the parent the child has a residency with the majority of the time (Dowd, 1997). If the parents are separated or divorced, children live with their custodial parent and have visitation or secondary residence with their non-custodial parent (Aldona & Nijole, 2012). In Western societies in general, following separation, a child will end up with the primary caregiver, usually the father. Custody battles, awarded by the court or rationalized in other terms, determine who the child will spend the majority of their time with. This affects children in many ways, and counseling is suggested for them.

Single parenthood as viewed by Bukola *et al.* (2018) is the taking of family responsibility which includes caring for children without the father's or mother's contribution. Recently, the number of single-parent families has increased drastically and it is gaining a global dimension. In the past, single parents in Nigeria were considered exceptional cases and their existence was previously unknown.

According to Harris and Jones (2015), the percentage of women with some level of education who have become mothers without marrying has more than doubled in the last decade. Among women with professional or managerial jobs, it has almost tripled. The suggestion, therefore, is that maybe marriage no longer serves women's interests. If women can support themselves, they do not need to marry. They feel they are secure economically. If a single parent can have sex at will with any man she fancies, have her own house, and gain the respect of friends and co-workers, she does not see any need to tie herself to the apron string of any man in bondage called marriage.

There are numerous effects of single parenting on children's education in Nigeria. Poor academic performance was typically the outcome of the financial difficulties Nigerian single parents faced, according to John and Shimfe (2020). According to Oyediran (2019), students with single parents perform poorly academically in a few chosen Oyo State schools. Children from dysfunctional families perform poorly because they don't receive enough parental attention for their schoolwork (Chukwuka, 2018).

Socioeconomic effects of single parenting include stress, unemployment, hunger, and other issues for Nigerian students. Poverty, aggression, anxiety, and abuse are characteristics of single-parent children in Nigeria, which may explain why some of them engage in drug use

and other social dangers (Olaleye *et al.*, 2017). Children from single-parent households experience psychological trauma, which can result in antisocial behavior and drug abuse, claims Mbah (2019). Furthermore, children from single-parent households are likely to experience low levels of social interaction and unemployment (Ali & Soomar, 2019).

Family lives have been disrupted by the rapid social change that comes with globalization (Olaleye *et al.*, 2017). Family background is key to a student's life in and outside of school. It is the most important influence on students' learning and includes factors such as socioeconomic status, two-parent versus single-parent households, divorce, parenting practice, and aspirations (Eamon & Mulder, 2015).

The environment at home is a primary socialization agent and influences a child's interest in school, and aspirations for the future. In reality, parents play a major role in their children's academic and professional development. However, situations such as divorce, separation of various kinds, or the death of one spouse can leave a single parent in charge of these responsibilities, which can cause issues for the victims. A parent's involvement in their child's education is crucial. The ability of a family to manage a child is essential for achieving success in school (Abd Hamid & Salleh, 2013).

The issue of this study is the rising rate of single parenting, which is causing students in a few junior secondary schools in the Ilorin West Local Government Area of Kwara State, Nigeria, to perform poorly academically. Compared to how appropriate and sufficient training is provided for other careers, professions, and vocations, people (spouses) may enter into marriage without any preparation, which may be the cause of the grave abnormalities known as single parenting that have destroyed nearly every aspect of life. Aside from the situations brought on by a spouse's passing, this lack of mandated training encourages mismatch in marriages, which in turn encourages single parenting both directly and indirectly.

In addition to the many anomalies brought about or exacerbated by single parenting, the researcher becomes especially interested in the one that has to do with the academic achievement of pupils in Kwara State junior secondary schools in the Ilorin West Local Government Area. This may be the case because a nation's level of development is directly correlated with the quality and scope of its educational system. Hence, the study aims to close this gap.

This study's primary goal is to determine how single parenting affects junior secondary school students' academic achievement in science-related courses. The following are specific goals to ascertain:

- (i) To determine the academic performance of single parenting and intact parenting students in mathematics Ilorin West L.G.A.
- (ii) To access the academic performance of single parenting students in mathematics based on pre and post-tests in Ilorin West L.G.A.
- (iii) To access the academic performance of intact parenting students in mathematics based on pre and post-tests in Ilorin West L.G.A.

Research Hypotheses are the following points:

- (i) H_{O1} : There is no significant difference in the academic performance of single and intact-parenting students in mathematics.
- (ii) H_{O2} : There is no significant difference in the academic performance of the experimental group (single parenting students) in mathematics based on pre-test and post-test experimental assessments.

- (iii) HO₃: There is no significant difference in the academic performance of the control group (intact parenting students) in mathematics based on pre-test and post-test experimental assessments.

2. THEORETICAL FRAMEWORK

The Bowen Family System Theory is in favor of this study. Families are networks of interconnected units whose members influence one another mutually, according to the Family Systems Theory. The core of family systems theory is how members of the same family interact with one another. The theory contends that patterns of interaction within the family are the root cause of both persistently problematic and non-problematic behavior. Family systems theory focuses on family dynamics, which include structures, roles, communication styles, and power dynamics (Rothbaum *et al.*, 2002).

Barreto *et al.* (2014) posit that family functions are established through patterns of interaction that become deeply embedded in habits that are difficult to break. Each member of the family is impacted by the type of family system they are a part of. According to Fasina (2021), alterations made to any facet of the family will impact every individual within the system. Any parent's death would affect the children in the family system, as would any temporary or final separations and divorces.

The Bowen family system theory, according to <https://aquila.usm.edu/dissertations/419>, emphasizes how family members are interdependent and communicate emotions to one another. Bowen's theory of family systems states that other family members may feel the same emotion at the same time or over several generations, just like a single member. Thus, this theory and the current research have numerous connections. Any family structure must include children, and a child's development is primarily influenced by their interactions with their parents. Single parents may become the result of systemic changes brought about by divorce, separation, or death. All family members—including the kids—are impacted by these changes. One of the most significant effects is on children's educational development because, Education depends on different family units functioning inside a societal system.

According to the Bowen family system theory, two of the eight concepts identified are thought to be relevant to this investigation. The following is a list of the eight concepts in the Bowen family system theory model. Only two will be addressed and used in this study. Emotional Cutoff, Sibling Position, Multigenerational Transmission Process, Nuclear Family Emotional Process, Differentiation of Self, Triangulation, and Societal Emotional Process.

Triangulation brings a third party into the family structure when there is conflict within the dyad. Triangulation occurs when a third party provides a dyad with support or a different approach to deal with their inevitable anxiety, according to Brown (1999). When someone withdraws emotionally or physically as a result of their emotional reaction to a situation, they have experienced the emotional cutoff (Brown, 1999). Two concepts that are crucial to this investigation are triangulation and emotional cutoff.

Children raised by a single parent often struggle emotionally and feel anxious because they have two absent parents. There may be pressure to offer security because parental attachment to one another affects a child's safety (Rothbaum *et al.*, 2022). Additionally, a third-party—friends, teachers, or other family members—may step in and help, which usually has a big positive impact on education. Children living with a single parent who had a divorce

experienced a death in the family or were temporarily or permanently separated from one parent and lost emotional contact with the other.

The effects of single parenting on the academic achievement of adolescents in secondary schools in Ejigbo Local Government Area of Osun State. A descriptive survey research design was employed. A total of 100 Senior Secondary students randomly selected from five secondary schools in the Local Government were involved in the study. The academic records of the students were obtained from their Principals.

Personal data forms were also used to collect information regarding their age, gender, religion, and the type of home they come from. Student's t-test statistic was used to analyze the data collected. Results indicated that students from intact homes had significantly better academic achievement than those from single-parent homes. A significant difference was found between the academic achievement of Christian and Muslim students from intact homes whereas none was found between the Christians and Muslims from single-parenting homes: Also, significant difference was found between the academic achievement of males and females from single-parenting homes but none between those from intact homes.

Azuka-Obieke (2013) investigated the influence of single-parenting on the psychological well-being and academic performance of adolescents in Lagos, Nigeria. A sample of 100 participants randomly selected from 5 secondary schools was used. Questionnaires and achievement tests were employed to generate data for the study. Two research hypotheses were formulated to guide the study. The hypotheses were tested using descriptive statistical techniques and t-tests.

The study revealed that children appeared to profit psychologically and academically when both parents provided aspects of an orderly and nurturing home life. Teachers, counselors, educational psychologists, and administrators need to know those factors that affect children from single-parent homes to better understand the behaviors and attitudes of the children they are teaching. While many children in single-parent homes grow up into successful, mature adults, many children being raised in single-parent homes may not reach their full potential due to inadequate family resources.

Aina (2022) investigated science education students' perceptions of single-parenting impacts on science learning. The research was a survey design that employed a self-designed questionnaire validated by science education experts. One hundred and ninety-seven science students selected randomly participated in the study. The data obtained were analyzed using descriptive statistics. Results show parents are critical in the educational development of students in Nigeria.

The findings show that a single parent (father or mother) training students leads to low academic performance, financial problems, and other socioeconomic problems like depression, hunger, deprivation, stress, and frustration. The finding also indicates that the number of single-parent sponsored students is low as against the notion that they are increasing in Nigerian schools. However, the present study focused on the impact of single parenting on the academic performance of junior secondary school students in Ilorin West LGA in public secondary schools. Being the gap, the present study intends to fill up.

3. METHODS

The effects of single parenting on junior secondary school student's academic performance in mathematics were examined in this study. 40 students were selected purposively, all of

whom were from single and intact parenthood. Responses were analyzed at 0.05 using an independent sample t-test @ 0.05 alpha. The first hypothesis showed a statistically significant difference in the academic performance of students from intact and single parenting in mathematics ($t\text{-cal} = 1.82$; $P < 0.05$).

3. RESULTS AND DISCUSSION

3.1. Demography

A nonequivalent comparison group design was used in this investigation. It is a design where the outcomes of the treatment group and a comparison group are compared to estimate the effect of a treatment or intervention, but without the advantage of random assignment. Purposive sampling was the method used in this study to select participants. to create an experimental design for a quasi-experiment using the participating schools. is a type of non-probability sampling where the researcher makes choices about who gets to be included in the sample? based on a range of factors, such as having specialized knowledge of any relevant issues, which could include experts, familiarity with the topic of the study, or the ability and desire to take part in the study. That being said, twenty individuals were chosen for each group, treatment, and control.

There were forty students in both the experimental and control groups. Consequently, JSS 1 students from Government Girls' Day Junior Secondary School in Pakata, who were raised by single parents or by intact families, were used. The mathematics achievement test (MAT), The study's instrument was an assessment created by a teacher. After the items were validated by an experienced maths teacher, they were administered using the split-half method to 20 students who were not included in the study sample to assess reliability. A reliability score of 0.78 was obtained. The intended population was then given the items. Nonetheless, the performance influence between the experimental group's main score and the control group's was analyzed at the 0.05 level of significance using a percentage and an independent sample t-test.

The number of respondents used for this study is 20 (50%) for both single and intact parenting students, both groups are female and from the same class (Jss one) and with the same chronological age of 12 years. Detailed data is in **Table 1**.

Table 1. Family structures of the respondents.

Family Structures	Frequency	Percentage
Single Parenting	20	50%
Intact Parenting	20	50%
Total	40	100%

3.2. H_{O1} : There is No Significant Difference in the Academic Performance of Single and Intact-Parenting Students in Mathematics

Table 2 shows that there was a significant difference in academic performance of single and intact parenting students in mathematics ($t\text{-cal} = 1.82$; $P < 0.05$) is statistically significant. Hence, non-hypothesis was rejected.

Table 2. Independent t-test on the difference in academic performance of single and intact parenting students in mathematics.

Variables	N	Mean	Std. Dev	Df.	t-cal.	p-value	Decision
Single Parenting	20	2.60	1.23	38	1.82	.000	Rejected
Intact Parenting	20	4.50	1.85				

3.3. H_{O2} : There is No Significant Difference in the Academic Performance of the Experimental Group (Single Parenting Students) in Mathematics Based on Pre-test and Post-Test Experimental Assessments

Table 3 shows that there was a significant difference in the academic performance of the experimental group (single parenting students) in mathematics based on pre-test and post-test experimental assessments. ($t\text{-cal} = -4.146$; $P < 0.05$) is statistically significant. Hence, the non-hypothesis was rejected, that is there was a significant effect of treatment on the performance of the experimental group.

Table 3. Paired samples t-test on the difference in academic performance of experimental group (single parenting students) in mathematics based on pre-test and post-test experimental assessment.

Single Parenting	N	Mean	Std. Dev	Df.	t-cal.	p-value	Decision
Pre-test	20	2.60	1.23	19	-4.146	.001	Rejected
Post-test	20	4.50	1.85				

3.4. H_{O3} : There is No Significant Difference in the Academic Performance of the Control Group (Intact Parenting Students) in Mathematics Based on Pre-test and Post-test Experimental Assessments

Table 4 shows that there was a significant difference in the academic performance of the control group (intact parenting students) in mathematics based on pre-test and post-test experimental assessments. ($t\text{-cal} = -3.444$; $P < 0.05$) is statistically significant. Hence, the non-hypothesis was rejected, that is there was a significant effect of treatment on the performance of the control group.

Table 4. Paired samples t-test on the difference in academic performance of the control group (intact parenting students) in mathematics based on pre-test and post-test experimental assessment.

Intact parenting	N	Mean	Std. Dev	Df.	t-cal.	p-value	Decision
Pre-test	20	2.60	1.23	19	-3.444	.003	Rejected
Post-test	20	4.50	1.85				

3.5. Discussion

The outcome of this study has some similarities with many previously published empirical studies and is also different from some. The finding of the current study shows that there was a significant difference in the academic performance of single and intact-parenting students in mathematics based on hypothesis one. This result shows that students from intact homes had significantly better academic achievement than those from single-parent homes. Also supported by the view of [Abd Hamid and Salleh \(2018\)](#) that parents play a critical role in their children's education. Achieving good academic results depends on a family's control of a child.

Also, the findings of hypotheses two and three revealed that there was a significant difference in the performance of both groups (single and intact) parenting students based on pre-test and post-test results. This result was similar to the outcome of [Aina \(2022\)](#) parents are critical in the educational development of students in Nigeria a single parent (father or mother) training students leads to low academic performance, financial problems, and other socioeconomic problems like depression, hunger, deprivation, stress, and frustration. The finding also indicates that the number of single-parent sponsored students is low as against the notion that they are increasing in Nigerian schools.

4. CONCLUSION

The impact of single parenting on junior secondary students' academic performance in mathematics was investigated in this study. To evaluate the student's performance, the researcher employed an academic performance test consisting of mathematical questions. Research showed that children of single parents performed poorly academically. However, after giving the participants treatment, it became clear from the post-test results that the treatment had a positive effect on how well they performed in the test. It is therefore essential to make certain recommendations in light of these findings.

Based on the research findings, the researcher recommends that

- (i) The government should discourage childbirth outside of marriage.
- (ii) To prevent the temptation of either a temporary or permanent separation, the government should guarantee employment for every young couple in a family system.
- (iii) To better understand the climate in their classroom, math teachers should set aside time to research the psycho-emotional challenges that their students face.

5. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.

6. REFERENCES

- Abd Hamid, S. R., and Salleh, S. (2013). Exploring single parenting process in Malaysia: Issues and coping strategies. *Procedia-Social and Behavioral Sciences*, 84, 1154-1159.
- Aina, J. K. (2022). Science education students' perceptions of single-parenting impacts on science learning. *African Journal of Humanities and Contemporary Education Research*, 3(2), 15-25.

- Aldona, A., and Nijole, C. (2012). Development of argumentation skills in IBT/L context: a complex case study of teacher professional development programme. *Вісник Національного технічного університету України Київський політехнічний інститут. Філософія. Психологія. Педагогіка*, 2, 145-152.
- Ali, S. K., and Soomar, S. M. (2019). Single parenting: Understanding reasons and consequences. *JOJ Nursing and Health care*, 10(2), 001-003.
- Azuka-Obieke, U. (2013). Single-parenting, psychological well-being and academic performance of adolescents in Lagos, Nigeria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 4(1), 112-117.
- Barreto, S., Adams, S. K., and Daly, J. (2014). Windows of opportunity: Family systems theory and developmental considerations for supporting youth, parents and clinicians in the digital age. *Journal of Youth Development*, 9(1), 1-15.
- Brown, J. (1999). Bowen family systems theory and practice: Illustration and critique. *Australian and New Zealand Journal of Family Therapy*, 20(2), 94-103.
- Bukola, I. A., Achakpa, P., Jamila, S., Donli, P., and Osakwe, B. (2018). The impact of farmer-herder conflict on women in Adamawa, Gombe and Plateau States of Nigeria. *Search for Common Ground*, 2018, 7-28.
- Chukwuka, F. O. (2018). Impact of single parent on child education in primary schools in Oshimili South Local Government Area of Delta State. *International Journal of Innovative Education Research*, 6(1), 101-107.
- Dowd, N. (1997). Equality and families. *Yearbook of New Zealand Jurisprudence*, 1, 81-95.
- Eamon, M. K., and Mulder, C. (2005). Predicting antisocial behavior among Latino young adolescents: An ecological systems analysis. *American Journal of Orthopsychiatry*, 75(1), 117-127.
- Fasina, F. F. (2021). The role of parents in early childhood education: A case study of Ikeja, Lagos State, Nigeria. *Global Journal of Human Social Science*, 11(2), 42-51.
- Harris, A., and Jones, M. (2015). Professional learning communities and system improvement. *Improving Schools*, 13(2), 172-181.
- John, W., and Shimfe, H. G. (2020). Single parenting and its effects on the development of children in Nigeria. *The International Journal of Social Sciences and Humanities Invention*, 7(03), 5891-5902.
- Mbah, J. C. (2019). Legal, social and economic implications of single parenting. *International Journal of Development Research*, 9(12), 32809-32815.
- Olaleye, F. O., Ajayi, A., Oyebola, O. B., and Ajayi, O. A. (2017). The psycho-social effect of single parenthood on children academic performance among selected secondary school in Ife central local government, Osun state, Nigeria. *International Journal of Higher Education and Research*, 7 (1), 81-109.

- Oyediran, A. O. (2019). Effects of single parenting on secondary school students academic performance in Afijio local government area of Oyo State. *International Journal of Innovative Education Research*, 7(4), 139-146.
- Rothbaum, F., Rosen, K., Ujiie, T., and Uchida, N. (2002). Family systems theory, attachment theory, and culture. *Family process*, 41(3), 328-350.