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# INFLUENCE OF PARENTING STYLES ON ACADEMIC ACHIEVEMENT OF SCIENCE AND TECHNICAL COLLEGE STUDENTS IN KANO STATE, NIGERIA

**By**

**Mu'azu Garba Usman**

**Mashkur Sani**

**Mujtaba Aminu Yusha'u**
*&*
**Fatima Umar Datti**

**Abstract**
*The study examined the influence of parenting styles on the academic achievement of science and technical College students in the Kano state of Nigeria. Two research objectives with one research question and one hypotheses were formulated to guide the study. An ex-post facto research design was employed for the study. The population of this study comprised 5,864 science and technical College students in Kano state, out of which 365 students were selected as samples using a multi-stage sampling technique. The data were collected using an adaptation of the Parenting Styles Questionnaire (PSQ) which was reported to have a reliability index of 0.91. The current researcher revalidated the face and content validity of the instruments. Reliability was established through internal consistency via a pilot test carried out on 40 senior secondary school students who are not part of the sample, the instruments were found to have a reliability index of 0.77. Also, an average mark in mathematics and English qualifying examination 2022/2023 was used as a measure of academic achievement. To analyze the data Descriptive statistics of simple percentage was used to answer research question. While an Analysis of variance (ANOVA) was used to test the hypothesis of the study. The study revealed that authoritative parenting style is the most prevalent parenting style practice by the parent of the respondents and no significant difference exist in academic achievement among respondents with different parenting styles. In line with the findings, the study concluded that: difference in parenting styles does not significantly influence the academic achievement of the respondents of this study. Based on these findings, the study recommended that Teachers and parents should continue to motivate their children to maximize their level of academic achievement.*
**Key Words:** *Academic Achievement, Parenting Styles, Authoritative, Authoritarian and Permissive*

## Introduction

The researcher has observed a disturbing and consistent pattern of declining performance in national examinations among secondary school students in Kano State. Recent data from NECO and NABTEB examinations reveals an alarming trend: NECO (2024) revealed that between 2021 and 2024, the percentage of students obtaining credit passes in core subjects has progressively decreased from 42.3% to 32.9%. This persistent academic underachievement has become a source of growing concern for teachers, parents, students, and all education stakeholders across the state. The worsening examination outcomes, particularly in English Language and Mathematics where pass rates dropped from 48.3% to 42.6% and 45.1% to 39.8% respectively during this period, have prompted this investigation into potential contributing factors. While multiple elements may influence academic performance, the researcher specifically seeks to examine whether parenting styles could be a significant factor in this downward trend of students' achievement.

Notably, despite the evident crisis in educational outcomes, there remains a critical gap in research. To the best of the researcher's knowledge, few or no comprehensive studies have systematically explored the relationship between parenting styles and academic achievement in this specific educational context. This study therefore aims to fill this important research gap by investigating how different parenting approaches may correlate with the declining academic performance observed in Kano State's secondary schools, particularly among Science and Technical students.
Nevertheless, parenting styles might influence academic achievement due to their varying dimensions. Authoritative parents are those who provide, supervise, listen, and offer warmth and care to their children, making them feel comfortable in school and relaxed in class, which may positively influence their academic achievement (Usman, 2024). On the other hand, authoritarian parents provide and supervise but do not value warmth and responsiveness, and are often harsh, which may lead to good academic achievement but also potentially result in anxiety that could hinder good academic performance. Meanwhile, students from permissive parents often experience a lack of supervision, receive few orders, but receive high levels of warmth and responsiveness, which might disadvantage their academic achievement.
Academic achievement and academic performance are used interchangeably which is the result of instruction, that is the level or extent to which a student, teacher, parents, or institution has achieved their educational goals and objectives (Usman, 2024). Steinmayr, Meibner, Weidinger, and Wirthwein (2017) Academic achievement represents performance outcomes that indicate the extent to which a person has accomplished specific goals that were the focus of activities in instructional environments, specifically in school, college, and university. They added that School systems mostly define cognitive goals that either apply across

multiple subject areas (e.g., critical thinking) or include the acquisition of knowledge and understanding in a specific intellectual domain (e.g., numeracy, literacy, science, history). To Yakubu (2017) Academic performance refers to what skills the student has learned and is usually measured through assessments like standardized tests, performance assessments, and portfolio assessments.

Child's parents are the most influential people in their lives up to the youths. Parents may differ in how they try to control or socialize their children and the extent to which they do so, it is believed that the primary role of all parents is to influence, teach and control their children. Adamu (2018) pronounced that, the dominant model in research on the parent-child relationship is most loosely associated with the early work of Baumrind in the 1960s and has been elaborated on by several subsequent terms investigators such as Moccoby and Martin (1983) and Hetherlinton in 1999. Parenting styles are defined as aggregates of behaviors that describe parent-child interaction over a wide range of situations, and that are presumed to create a pervasive interactional climate (Cramer, 2002 as cited in Ifeoma 2016).

Baumrind (1971) recognized three shapes of parenting styles based on two aspects of parenting behavior: control and warmth. Parental control denotes the level to which parents manage their children's behavior from being very controlling to setting few rules and demands. Parental warmth refers to the amount to which parents are accepting and responsive to their children's behavior as opposed to being unresponsive and rejecting.

Researchers have developed the concept of parenting styles to describe the interaction between parent and their children during the socialization process. According to Ibukunolu (2013), much of the research on parenting styles has been on Baumrind‟s (1966) three (3) distinct styles: authoritarian, authoritative (Democratic), and permissive.

An authoritative parent is warm but Firm. Adamu (2018) stated that Authoritative parents used to encourage their adolescents to be dependent while maintaining limits and controls on their actions. And added that, Authoritative parents do not invoke the ‘’because I said’’ rule. Instead, they are willing to entertain, listen to, and take into account their teen's viewpoint. Authoritative parents know and understand children's independence, encourage verbal communication, allow children to participate in the decision-making of the family, and want the children progressively undertake more responsibility for reacting to the needs of other people in the family within their abilities.

Authoritarian parenting style place high importance on conformity and obedience, but does not value warmth and responsiveness (Baumrind 1968 cited in Adamu 2018, P10) Muhammad (2015) opined that, authoritarian parents do support their children but in most cases, they do not accept failure from children. This in turn will make the children sometimes protest and decide to run away from the family. Ibukunolu (2013) stated that the authoritarian style of parenting has the following characteristics: parents attempt to shape, control, and evaluate the behavior and attitudes of their children by an absolute set of standards; parents emphasize obedience, respect for authority, work, trading and the preservation of order; the verbal exchange between parents and child is discouraged.

Permissive parents in terms of the dimensions of parenting styles are highly low on demandingness and control and high on warmth in responsiveness. Permissive parents enjoy a cordial relationship and adequate support. These kinds of children used to be happy and are more self-reliant compare to others. It is more popular in the middle-class family than in lower-class families. In this family setting a child's freedom and autonomy are highly valued and the parents tend to rely mostly on reasoning and explanations (Muhammad, 2015). Ibukunolu (2013) permissive parenting, is a pattern in which parents are tolerant and accepting of the child's impulses, use as little punishment as possible, make few demands for mature behavior, and allow considerable self-regulation by the child. She found the children of permissive parents as immature, lacking impulse control and self-reliance, and exhibiting a lack of social responsibility and independence.

Several kinds of research have been carried out about the influence of parenting styles on students' academic performance/achievement for example a study carryout by Ifeoma (2016) which was investigated the influence of parenting styles on school adolescents' achievement orientation and academic achievement in secondary schools in Enugu State. The design of the study is ex-post facto while the population comprised all SS II Students in Enugu North. The sample size for the study was 296 respondents while the researchers' self-developed questionnaires formed the instruments for data collection. The study found that the authoritative parenting style has a more positive influence on achievement orientation and academic achievement of in-school adolescents (p-value 019<0.05) In addition, Kemunto (2016) studied relationship among Parenting Styles, Learner's Involvement in Behaviour Problems and Academic Performance in Nairobi County, Kenya. This research study used a mixed method involving descriptive and correlational research designs. Quantitative data was collected from learners using questionnaires while qualitative data was collected from parents using interviews. The population of the study was drawn from three randomly selected sub-counties of Nairobi County namely: Dagoretti,

Lang‟ata, and Starehe. Fifteen schools were randomly selected from the three sub-counties. A total of 400 learners from regular public secondary schools and 40 parents were randomly selected for the study. The findings of the study revealed that learners of authoritative parents have low involvement in problem behaviour and perform better academically as compared to learners of authoritarian, permissive, and neglectful parents.

In the same vein, empirical research was conducted by Hassan and Min Sen, (2017) cross-sectional survey research was adopted in this study, whereby the researcher randomly selected 302 undergraduates from University Putra by using a cluster sampling method. A sample of 30 undergraduates participated in the pilot study. The finding from this study showed there was no significant relationship between authoritative parenting style and undergraduates' academic performance ($r$ = -0.071), the correlation was significant at $p < .05$. As well as permissive parenting style and undergraduates' academic performance (r = 0.061), the correlation was significant at $p < .05$. However, the finding showed there was a negatively significant relationship between authoritarian parenting style and academic performance *(*$r$ = -0.160), the correlation was significant at $p<.05$. The result showed, that is a low significant negative relationship between academic achievement and authoritarian parenting style.

Finally, Akanni (2019) carried out a study to determine the influence of parenting types on students‟ academic performance in financial accounting in Kano state, Nigeria. The expo-facto research design was employed to find out the influence of parenting types on students‟ academic performance in financial accounting in Kano state, Nigeria. The population of the study was 17883 financial accounting students in Kano state. A sample of 216 financial accounting students was selected based on their parenting category. It was found among others that, the type of parenting does not influence the performance of secondary school students in financial accounting ($p < 0.05$) Based on this the present research developed interest in finding out whether parenting styles influence students' academic achievement or not in Science and Technical College students of Kano State.

**Statement of the Problem**

Concerns have been raised in recent years about the low and declining trends in academic achievement among Kano State students, especially among Science and Technical School students. Most students fail English Language, Mathematics, and other subjects, according to evidence from the West African Examination Council (WAEC) results from 2021 to 2024. For instance, the achievement trend showed that the percentage of candidates who obtained 5 credits and above, including

Mathematics and English Language in WAEC, declined from 42.3% in 2021 to 39.1% in 2022, then dropped further to 35.7% in 2023. Preliminary 2024 data indicates a continued downward trend to 32.9%.

This trend could be attributed to many factors, such as the influence of home background factors, among others. This has become a major point of concern to students, teachers, parents, guardians, as well as other stakeholders in the field of education, including researchers. If this problem is not addressed, the issue of poor academic achievement in English Language and Mathematics in Kano State, particularly in Science and Technical Schools, may grow worse. Why this problem keeps persisting demands urgent research. However, little or no research has been conducted on why students have been failing Mathematics and English Language. Based on these premises, this study aims to examine the influence of parenting styles on students' academic achievement at Science and Technical Colleges in Kano State.

**Purpose of the Study**

The present study achieved the following objectives:

1. To determine the most prevalent dimensions of parenting styles among Science and Technical College students in Kano state;
2. To find out whether there is a difference in academic achievement among students from different dimensions of parenting styles (authoritative, authoritarian, and permissive) among Science and Technical College students in Kano state

**Research Question**

A research question was raised to guide the study:

1. What are the most prevalent dimensions of parenting styles among Science and Technical College students in Kano state?

**Hypotheses**

The following postulated hypotheses were tested at a 0.05 level of significance:

**$H0_1$**: There is no significant difference among academic achievement of students from different dimensions (authoritative, authoritarian, and permissive) of parenting styles among Science and Technical College students in Kano state.

**Methodology**

Ex-post-facto design was adopted as the research design for the present study. The population of the study consists of all SS Two students aged 16-19 in Science and Technical colleges in Kano State. According to the Science and Technical Schools

Board report for 2021/2022, the aggregate enrolment for SS II students in Science and Technical Colleges in Kano State was five thousand eight hundred and sixty-four (5,864), out of which 365 were selected as the sample size as recommended by Research Advisors (2006) through a multi-stage sampling technique which includes the following stages: purposive, stratified random sampling, and simple random sampling technique, and proportionate sampling.

The data were collected using a Parenting Styles Questionnaire adapted from Sa'idu (2018) as developed by Baumrind (1991). The instrument was used by the developer to address the 3 types of parenting styles exhibited by parents: authoritative, authoritarian, and permissive parenting styles. The instrument was adopted for the present study from the work of Sa'idu (2018). The instrument has twenty-four (24) items, and for the three (3) parenting styles, each has eight (8) items on a four-point Likert scale of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD), where 4 stands for SA, 3 for A, 2 for D, and 1 for SD respectively. Therefore, the highest score for each of the three parenting styles is 32 and the lowest is 8. Any student scoring below 20 does not form part of the category of that parenting style, and any student scoring above 20 belongs to the category of that parenting style.

The original developer revealed that the face and construct validity of the instrument were determined by experts in the field of educational psychology, and test and measurement. Similarly, the present researcher determined face and content validity of the instrument. Academic achievement was measured using the qualifying examination results of the 2022/2023 academic session for English and Mathematics. The original version of the instrument has an internal reliability coefficient of 0.913 as the coefficient of stability. The current researcher also assessed the internal reliability index of the instrument through a pilot test using 40 students who were not part of the research sample; the results were divided into two using odd and even numbers and were later correlated using PPMC (r). The study reported a reliability index (alpha) of 0.77. The data collected in the study were analyzed using both descriptive and inferential statistics. Simple percentages were used to answer research questions, while the inferential statistic of Analysis of Variance (ANOVA) was used to test the hypotheses at a 0.05 level of significance with the aid of the Statistical Package for Social Sciences (SPSS) version 25.

**Results**

**RQ:** What are the most prevalent dimensions of parenting styles among Science and Technical College students in Kano state?

**Table: 1 Dimensions of Parenting Styles among Science and Technical College Students in Kano State**

| Parenting styles | Frequency | Percentage |
|---|---|---|
| Authoritative | 245 | 67% |
| Authoritarian | 111 | 30% |
| Permissive | 9 | 3% |
| **Total** | **365** | **100%** |

Table 1 revealed that the most common types of parenting styles among respondents of this study are authoritative which has the highest frequency of 245 respondents 67%, followed by authoritarian with 111 respondents representing 30%, and Permissive which has only 9 respondents representing 3%. According to this finding most of the students their parents found to practice authoritative parenting styles.

**$Ho_1$:** There is no significant difference in academic achievement between students from different dimensions (authoritative, authoritarian, and permissive) of parenting styles among Science and Technical College students in Kano state.

**Table 2: Analysis of variance (ANOVA) based on the class subject area of the Respondents**

| Variables | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 942.281 | 2 | 471.140 | .437 | .646 |
| Within Groups | 389842.339 | 362 | 1076.913 | | |
| **Total** | **390784.619** | **364** | | | |

The 2 shows the f-calculated value of .437 with a p-value of .646. The p-value is greater than 0.05 level of significance. Thus, the null hypothesis is retained and concluded that, there is no significant difference in the mean scores of academic achievements of Science and Technical College students in respects to their parenting styles.

**Discussion**

The present study aimed at examining the influence of parenting styles on the academic achievement of science and technical College students in the Kano state of Nigeria. The finding of this study is discussed and compared with empirical studies done previously by other researchers. These discussions are carried out based on the issues relevant to the research question and the null hypotheses that guided the study.

According to the finding from research question one authoritative parenting style is the most prevalent parenting styles practice by parents of the respondents which has the highest frequency of 245 respondents 67%, follow by authoritarian with 111

respondents representing 30% and Permissive which has the least of 9 respondents representing 3%. This indicate that majority parents of the respondents have strong effort in controlling their children, are highly restrictive, make strong demand for maturity, show strong support, love and feeling and have clear visions on what they want their children to do. This is line with the Ahmad (2024) who found that authoritative parenting style is the most prevalent parenting style practice by the parent of the senior secondary school student in Gurara, Niger state, Nigeria and Abdulahi (2024) which found that authoritative parenting style was the most prevalent among secondary school students in the Nassarawa Zonal Education Directorate, Kano State, Nigeria.

The second finding of this study showed that there is no significant difference in academic achievement among respondents with different parenting styles. The findings of this study tend to agree with the opinion expressed by Hassan and Min Sen (2017) that parenting styles do not have a significant relationship with student's academic achievement. The finding of this study also agrees with the findings of Akanni (2019) who conducted a study on the influence of parenting types on students" academic performance in financial accounting in Kano state and concluded that parenting type does not influence the performance of secondary school students in financial accounting. This agreement may be because both the current study and the previous ones were conducted in the same location. While the findings of the study are contrary to the findings of Rauf and Ahmed, (2017) which revealed that authoritarian parenting style is a significant predictor of academic performance in school students. The authoritarian parenting style is a significant predictor of academic performance.

The finding of the study does not also agree with the findings of Ochieng, Jo, and Agwaya (2018). Their study on the Relationship between Permissive Parenting Style and Examination Cheating Tendencies among Kenya Secondary School Students concluded that permissive parenting has a strong positive influence on examination cheating tendencies. The researcher attributes the difference to the contextual factors; the researcher's findings may be influenced by contextual factors such as cultural differences, historical events, or change in societal norms. These factors can vary across studies and contribute to differences in results and findings.

## Conclusion

Based on the research findings, this study concludes that variations in parenting styles (authoritative, authoritarian, and permissive) do not exert a statistically significant influence on the academic achievement of students in Science and Technical Colleges in Kano State, Nigeria. This conclusion emerges from

comprehensive data analysis showing no meaningful differences in English and Mathematics performance across students from different parenting style backgrounds.

**Recommendations**

Based on the findings of the study the following recommendations were made:

1. Educational psychologist should conduct mixed-methods studies to identify the key drivers of academic achievement in technical education, since parenting styles showed no significant impact. Prioritize investigating institutional factors (teacher job satisfaction) and student-level variables (motivation, peer influence) through longitudinal designs.
2. school administrators and counselors should redirect resources toward improving school-based support systems rather than parenting interventions. Strengthen teacher training in technical pedagogy, upgrade workshop facilities, and implement targeted counseling for STEM-related anxiety. These institutional improvements may yield greater academic returns than family-focused programs in this specialized setting.

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