Parental influence on the academic performance of secondary school students in physics

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Abstract
This study examines parental influence on the academic performance of secondary school students in Physics. The study was guided by four research questions and four null hypotheses and employed an ex post facto research design. The population comprised private secondary schools in the Gusau Local Government Area of Zamfara State. The study was carried out on 200 senior secondary three (SS3) students during the 2024/25 session. Purposive and proportionate stratified random sampling techniques were used to select the sample. The researchers developed the Academic Achievement Proforma (AAP) and Parental Influence Questionnaire (PIQ) for data collection. The validity of the PIQ was assessed by three (3) experts and was found to be reliable after being subjected to Cronbach's alpha to obtain an overall internal consistency index of 0.67. Regression analysis was used to answer the research questions and hypotheses. The study found a direct influence of parental style, support, and involvement on the academic performance of secondary school students in physics. The academic performance of secondary school students in physics is highly influenced by parental style and involvement but the influence of parental support was not statistically significant. The following recommendations were made, among others, that parents should learn a good style of parenting and provide more academic support to their children to improve their academic performance in secondary school Physics, especially in Gusau, Zamfara State.

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1. Introduction

Education has become a key tool for transmitting societal norms and values. It is an enterprise that attracts resources from individuals, families, governments, and communities to achieve its objectives. Secondary school education in Nigeria is an intermediate education stage which is received by children immediately after primary education and before the tertiary stage (Federal Republic of Nigeria, FRN, 2013). It is the foundation for every Nigerian child because it prepares them for tertiary education, and a responsive living within the society and the world at large. Secondary education in Nigeria is divided into two levels, namely: the junior and senior levels. The 3 in the system of education operated in Nigeria represent the three years senior secondary school level (FRN, 2013). At this level of education, students are expected to take selected a minimum of four (4) subjects from a field of study. The secondary school curriculum in Nigeria contains four field of study, namely: science and mathematics, technology, humanities and business education. In line with the National Policy on Education by Federal Republic of Nigeria in 2013, Physics is one out of the eight subjects listed under in science and mathematics.

Physics is the branch of science that deals with the study of matter and energy, and its relationship in a fundamental way (Ogundeji, 2024). It is an aspect of natural sciences that solely rely on experiments, measurement and mathematical analysis for finding quantitative physical laws that explains everything in nature. As a result, it became not only an ordinary subject but the most fundamental of sciences, having deep philosophical implications with ontological and epistemological aspects that is capable of transforming one's intellectual life (Kabil, 2015). Physics is one of the important STEM subjects relevant to equipping secondary school students for a scientific world (Ogundeji, 2024). This means knowledge in physics has contributed immensely to making life

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comfortable by broadening and deepening knowledge across various disciplines, including Earth, Agricultural, Chemical, Biological, and Environmental Sciences.

Owing to the great importance of physics to other disciplines and national development, governments at all levels have been trying to improve the teaching and learning of physics. The provision of facilities and teaching materials, encouraging teachers to attend workshops and seminars, and the introduction of several innovations, such as the use of computer-assisted instructional packages and arrays of pedagogical strategies, are some of the efforts made by the Nigerian government. Yet, students' academic achievement in physics remains low as Nigerian secondary school students continue to perform poorly in the subject. The West African Senior School Certificate Examination (WASSCE) chief Examiners' Reports indicate that candidates' raw mean scores in Physics Paper 2 declined from 34 to 19 out of 60 between 2020 and 2023. The persistently poor performance of Nigerian physics students in the WASSCE each year has become a source of concern for stakeholders in Nigeria.

The literature has traced unsatisfactory student performance to school-related factors, such as the lack, of availability of teaching facilities and equipment with modern infrastructures, the lack of more qualified and experienced teachers than in the past, and the failure to apply more innovative teaching methods and strategies, as well as basic amenities for effective learning (Adu, 2016; Idakwoji, 2016). Student-related factors include students' interest and attitude to learning, effort to learn, and personality characteristics (Oluremi et al., 2015; Orji et al., 2023; van Griethuijsen et al., 2015). However, the irony of it all now is that even if these factors, which are school-related and student-related, were to be sufficient, some of these students will still perform poorly while some will perform well. This implies that there may be some influence from other factors that may affect students' performance.

Nigerian researchers have linked students' performance to home-related factors, including parenting style, parental support (Akpan & Umobong, 2013; Ugwuanyi et al., 2020), socioeconomic status, the home educational environment (Madu & Akobi, 2014), and parental educational background, socioeconomic status, disciplinary style, and family type (Okunamiri et al., 2010). However, no study in Nigeria has reported the connection between students' academic performance and parental influences such as parental style, support, involvement/engagement, and their combined influences. This is the gap that this study intends to fill. Though the study carried out by Ugwuanyi et al. (2020) on parenting style and support in learner performance in physics in Enugu State is similar to the present study, it differs in location. The cultural background of the two studies differs precisely, that is, - Igbo and Hausa cultures. In addition, parental involvement was not part of the variables studied by Ugwuanyi, but it is a variable in this study. Enbeyle et al. (2020) studied parental influence on students' academic achievement in Ethiopia not in Nigeria. The study examined parental influence using the following indicators: income level, financial provision for basic and educational needs, parental occupation, family size, educational attainment, and methods of motivating children. However, the approach of the present study is not the same as that of Enbeyle et al.'s study, since the present study is to examine the influence of parental style, support, and involvement on student performance.

Indicators of parental style have been categorized in Baumrind's works (1971, 1989) as authoritarian, authoritative, and permissive parental styles. However, some studies have identified uninvolved parenting as a third category (Gao et al., 2021; Krause & Dailey, 2011; Leeman et al., 2014; Zhang et al., 2020). Authoritative parenting style was positively associated with academic achievement (Samina et al., 2014). Authoritative parenting style and student motivation were significantly associated with academic achievement, whereas neglectful parenting style was negatively associated with academic achievement (Mihret et al., 2019). Parenting styles showed a statistically significant effect on authoritativeness and a marginally significant effect on authoritarianism (Argyriou et al., 2016). Authoritarian and overprotective parenting styles significantly influence the academic ability (Kostereliogl u, 2018). However, several parenting-related factors that significantly influence students' engagement in learning at school (Zhang et al., 2022). Factors such as the availability of learning resources at home, parental monitoring and supervision, parental expectations, and motivational support. This implies that parenting style, support, and involvement may be shaped by family peer, community, school, and cultural influences.

Meanwhile, parenting style and parental support were found to significantly influence the performance of learners in physics (Ugwuanyi et al., 2020). Akomolafe and Adesua (2016) also reported a statistically significant positive relationship between parental support and academic performance. Similarly, Hill and Tyson (2009) found that parental support significantly promotes positive academic skills among elementary school students, particularly effective study habits, self-regulated learning, problem-solving abilities, task persistence, and effective time management skills. This implies that good parental support and involvement may favor students' academic performance in physics and vice versa.

The dimensions of parental involvement explained in Naseema and Abdul Gafoor (2001) were nine, to include: parental acceptance, parental attention, parental guidance, parental aspiration, parental encouragement, parental decision-making, parental provision of physical facilities, and parental care to the physical fitness of the child. Ravik et al. (2013) reported that parental involvement significantly enhanced the performance of learners in school-related activities. Karbach et al. (2013) established a statistically significant relationship between parental involvement and academic performance, indicating that parental involvement is an important predictor of academic achievement and educational success (Ming-Te & Sheikh-Khali, 2014). However, Nurit (2013) reported a positive association between parental involvement at home and academic achievement. Similarly, Kadar-Satat et al. (2017) found that parents' active participation in school-related activities significantly contributed to favourable educational outcomes.

Gulhan's (2023) systematic literature review highlighted the extent of parental involvement in STEM education. Dotterer (2021) reported that parental participation in STEM activities predicted the success of adolescents in STEM courses and was positively associated with their STEM self-efficacy. Similarly, Chen et al. (2022) highlighted the significant role of perceived parental expectations in shaping STEM career aspirations. Studies across diverse cultural contexts have shown that different parenting behaviors have distinct implications for adolescents' learning processes and academic experiences at school (Gralewski & Jankowska, 2020; Otani, 2019). To this end, parenting continues to be a significant factor influencing academic achievement across schools and cultural contexts (Fute et al., 2024).

Based on this backdrop, the researchers sought to determine the influence of parental support and involvement on secondary school students taking physics, especially within the study area of Gusau. Gusau is the capital of Zamfara State, a state in Nigeria's northwestern region. Most of the population with Gusau is Fulani people from a Hausa cultural background. They are predominantly Muslim, and their way of life, community laws, and governance are deeply guided by traditional Islamic values. Zamfara State has been one of the most educationally disadvantaged states in Nigeria (Dahiru and Abdullahi, 2026) because the region has historically been known to be cautious in embracing Western education (Kanu et al., 2024). However, this situation has improved due to increased efforts by government and private-sector stakeholders to expand and enhance learning opportunities (Ogundeji et al., 2026). Hence, what is the parental influence (i.e., parental style, support, and involvement) on the academic performance of secondary school students in physics in Gusau, Zamfara State?

Statement of the problem

Poor academic performance among students has become a major concern for parents, school administrators, policymakers, and government agencies responsible for secondary education provision and management of secondary education. Students that are to spend 3 years in senior secondary school end up spending four or 5 years, and parents have to pay school fees for this number of years. Parents also feel the pain of registering their fouls for WASSCE and NECO twice or more, as many students hardly achieve the required grades needed for admission into tertiary institutions. As a result, the responses of school managers have put classroom teachers under pressure to generate high test scores, regardless of these scores representing students' cognitive capacity.

Frantic efforts have been made by stakeholders toward promoting students' performance, especially in physics; this includes: parents giving preference to and patronizing private secondary schools; school management making available adequate teaching facilities and equipment with modern infrastructure; making available more qualified and experienced teachers; policymakers

making policies that will ensure students study under good classroom conditions as well as making sure that various schools comply with the student-teacher ratio; and ensuring that various government agencies (such as WAEC) report students' performance and their difficulty areas. Considering this, the researcher seeks to determine the parental influence on the academic performance of secondary school students in physics in Gusau, Zamfara State.

Objectives of the study

The main objective of this study is to determine parental influence on the academic performance of secondary school students in physics in Gusau, Zamfara State. Specifically, the research intends to investigate the:

a. Parental style influence on the academic performance of secondary school students in physics.

b. Parental support influence on the academic performance of secondary school students in physics

c. Parental involvement influence on the secondary school students' academic performance in physics.

d. Combination of parental style, support, and involvement on the academic performance of secondary school students in Physics

Research Questions

The following research questions guided this study:

a. What relationship exists between parental style and the academic performance of secondary school students in physics?

b. What relationship exists between parental support and the academic performance of secondary school students in physics?

c. What relationship exists between parental involvement and the academic performance of secondary school students in physics?

d. What is the relationship between parental influence, comprising parental style, support, and involvement, and the academic performance of secondary school students in physics?

Research Hypotheses

The four (4) null hypotheses developed for the study were tested at the 0.05 level of significance.

a. No statistically significant relationship was found between parental style and secondary school students' academic performance in physics.

b. No statistically significant relationship was found between parental support and secondary school students' academic performance in physics.

c. No statistically significant relationship was found between parental involvement and secondary school students' academic performance in physics.

d. No statistically significant relationship was found between parental influence, comprising parental style, support, and involvement, and secondary school students' academic performance in physics.

2. Method

This study adopted an ex post facto research design. Ex post facto literally means "from what is done afterward" (Kumar, 2017). It applies to studies that examine potential cause-and-effect relationships by retrospectively identifying plausible factors that may have contributed to it. The researchers only linked some already existing variables (parental style influence, parental support influence, and parental involvement influence) as causative agents to the dependent variable (i.e., academic performance of secondary school students in physics). The study population comprised

2,321 SS3 students in the 2024/2025 session in 29 private secondary schools in Gusau, Zamfara State (Zamfara State Ministry of Education, 2024).

The sample size for this study was 200 students. Purposive and proportionate stratified random sampling techniques were used to select the sample size. The reason for using the purposive sampling technique was that the researcher sought after schools that are not biased in the assessment of students and have good track records of stable physics teachers, since the researchers will be using the students' assessment scores for the study. Proportionate stratified random sampling techniques were used to select 200 students in the 8 schools, i.e., 25 SS3 students from each school. The reason for using proportionate stratified random sampling was that the schools were in strata, and the researcher selected an equal number of students from each of the strata (i.e., sampled schools). Two (2) instruments were used in this study: a questionnaire and a proforma. The PIQ contains two sections: Section A contains the demographic information of the students, and Section B contains three clusters (A-C). Cluster A has 16, Cluster B has 13, and Cluster C has 15 items. PIQ is designed on a four-point scale with the following responses: Strongly Agree, Agree, Disagree, and Strongly Disagree. The instruments were validated using face and construct validity. The items that survived were used for the final instrument draft. The PIQ was reliable using Cronbach's alpha method because the instrument was scored polytomously. The reliability indices obtained on clusters A to C were 0.63, 0.72, and 0.68, respectively, and the overall reliability index obtained was 0.67, indicating the reliability of the instrument. The second instrument, titled Academic Achievement Proforma (AAP), has the following features: Name of School, Student Serial Number, 1st and 2nd term, and average score. The researchers visited the sampled schools on different days to administer the instruments to SS3 physics students. A total of 200 copies of the instrument were distributed to the participants. A direct delivery method was used. i.e., the researcher administered and collected the completed instruments at the same location. This was done to ensure the retrieval of all administered instruments. The scoring was performed by assigning 4, 3, 2, and 1 point to strongly agree, agree, disagree, and strongly disagree, respectively. Data collected using the questionnaire were coded and converted to the same scale. Regression analysis was used to analyze the collected data.

3. Results and Discussion

3.1. Research Question 1

What relationship exists between parental style and the academic performance of secondary school students in physics?

Table 1 shown a Regression analysis between parental style influence and physics academic performance of secondary school students

Table 1. Regression analysis between parental style influence and physics academic performance of secondary school students.

Model	R	r Square	Adjusted r-square	Std. Error in the Estimate
1	.199	.040	.035	16.020

r = correlation coefficient; r^2 = determination coefficient

To address this research question, the scores of the respondents on parental style influence were correlated with the academic performance of the students of physics. The analysis yielded a correlation coefficient of 0.199, indicating a weak positive relationship between parental style influence and the academic performance of secondar school students in physics. The coefficient of determination (r^2) was 0.040, which implies that the influence of parental style accounted for 4.0% of the variation in the academic performance of the students in Physics. The remaining 96.0% of the variation was associated with factors other than parental style influence.

Hypothesis 1

H_{01}: There is no statistically significant relationship between parental style and physics academic performance secondary school students. To test Hypothesis 1, we examined the ANOVA table from the regression analysis was examined. As shown in Table 2, an F-ratio of 8.189 was obtained, with an associated exact probability value of 0.005.

Table 2. Analysis of the predictive power of parental style on secondary school students' academic performance in physics

Model	Sum of Squares	df	Mean Square	F	Sig.	Dec.
Regression	2101.670	1	2101.670	8.189	.005	NS
Residual	50815.450	198	256.644			
Total	52917.120	199				

p< 0.05

Since the p-value of 0.005 is less than the 0.05 level of significance, the result was statistically significant. Therefore, the null hypothesis was rejected, indicating a statistically significant relationship between the influence of parental style and the academic performance of secondary school students in physics. This finding implies that parental style significantly influences the academic performance of students in Physics.

3.2. Research Question 2

What relationship exists between parental support the academic performance of secondary school students in physics?

To answer this research question, the scores from the respondents' responses on parental support influence were correlated with academic performance of physics students. The results in Table 3 show that the correlation coefficient was 0.109.

Table 3. Regression analysis between parental support and the academic performance of secondary school students in physics.

Model	R	r Square	Adjusted r- square	Std. Error in the Estimate
1	.109	0.012	.007	16.25

r = correlation coefficient; r^2 = determination coefficient

This means that the influence of parental support was associated with academic performance of secondary school students in physics. Table 3 also show that the coefficient of determination (r^2) associated with the correlation coefficient of 0.109 was 0.012. This correlation coefficient indicated that 1.2% of secondary school students' academic performance in physics is due to the influence from parental support. This indicates that 98.8% of the variation in academic performance of secondary school students in physics is attributed to factors other than parental support.

Hypothesis 2

H_{02}: There is no statistically significant relationship between parental support influence and physics academic performance of secondary school students. To test Hypothesis 2, we used the ANOVA table from the regression analysis was used. As presented in Table 4, an F-ratio of 2.397 was obtained with an associated probability value of 0.123 was obtained. Because the probability value of 0.123 is greater than the 0.05 level of significance, the result was not statistically significant.

Table 4. Analysis of the predictive power of parental support on secondary school students' physics academic performance.

Model	Sum of the Squares	df	Mean Square	F	Sig.	Dec.
Regression	632.924	1	632.924	2.397	.123	NS
Residual	52284.196	198	264.062			
Total	52917.120	199				

p< 0.05

Therefore, the null hypothesis, which stated that there is no statistically significant relationship between parental support and the academic performance of secondary school students in physics, was not rejected. It was consequently concluded that parental support does not have a statistically significant influence on academic performance of secondary school students in physics.

3.3. Research Question 3

What relationship exists between parental involvement and the academic performance of secondary school students in physics?

Respondent scores on parental involvement were correlated with students' academic performance in Physics. As shown in Table 5, a correlation coefficient of 0.159 was obtained, indicating a weak positive relationship between parental involvement and academic performance in physics.

Table 5. Regression analysis of the predictive power of parental involvement on the academic performance of secondary school students in physics

Model	R	r Square	Adjusted r-square	Std. Error in the Estimate
1	.159	.025	.020	16.140

r = correlation coefficient; r^2 = determination coefficient

The coefficient of determination (r^2) was 0.025, indicating that parental involvement accounted for 2.5% of the variation in the academic performance of the students of Physics. Conversely, the remaining 97.5% of the variation was attributable to other factors that were not examined in the study.

Hypothesis 3

H_{03}: There is no statistically significant relationship between the influence of parental involvement and the academic performance in physics. To test hypothesis 3, the ANOVA table from the regression analysis was used. As presented in Table 6, an F-ratio of 5.136 was obtained with an associated probability value of 0.025 was obtained. Since the probability value of 0.025 is less than the significance level, the result was statistically significant.

Table 6. Analysis of the predictive power of parental involvement influence on secondary school students' physics academic performance

Model	Sum of Squares	df	Mean Square	F	Sig.	Dec.
Regression	1337.875	1	1337.875	5.136	.025	S
Residual	51579.245	198	260.501			
Total	52917.120	199				

p< 0.05

Therefore, the null hypothesis, which stated that there is no statistically significant relationship between parental involvement and the academic performance of secondary school students in Physics, was rejected. It was consequently concluded that parental involvement has a statistically significant influence on the academic performance of secondary school students in physics.

3.4. Research Question 4

What is the relationship between parental influence, comprising parental style, support, and involvement, and the academic performance of secondary school students in physics?

To answer this research question, the scores from the responses of the respondents on the parental influence (i.e., the linear combination scores of parental style, support, and involvement) were correlated with students' academic performance in physics. As shown in Table 7, a correlation coefficient of 0.210 was obtained, indicating a weak positive relationship between parental influence and academic performance in physics.

Table 7. Regression analysis of the predictive power of parental influence on physics academic performance of secondary school students

Model	R	r Square	Adjusted r-square	Std. Error in the Estimate
1	.210	.044	.029	16.067

r = correlation coefficient; r^2 = determination coefficient

Table 7 also shows that the coefficient of determination (r2) associated with the correlation coefficient of 0.210 was 0.044. This r2 indicated that 4.4% of secondary school students' academic performance in physics was due to parental influence. This indicates that the remaining 95.6% of the variation in the academic performance of secondary school students in physics is associated with factors other than parental influence, represented by the combined effects of parental style, parental support, and parental involvement.

Hypothesis 4

H_{04}: There is no statistically significant relationship between parental influence (i.e., combined influence of parental style, support, and involvement) and the academic performance of secondary school students in physics. To test hypothesis 4, the ANOVA table of the regression analysis was used. Table 8 shows that an F-ratio of 3.000 was obtained with an associated exact probability value of 0.032 was obtained.

Table 8. Analysis of the predictive power of parental influence on the academic performance of secondary school students in physics

Model	Sum of the Squares	df	Mean Square	F	Sig.	Dec.
Regression	2323.080	3	774.360	3.000	.032	S
Residual	50594.040	196	258.133			
Total	52917.120	199				

p< 0.05

This probability value of 0.032 was compared with 0.05 set as the level of significance for testing the hypothesis, and it was found significant because 0.032 is less than 0.05. The null hypothesis, which stated that there is no statistically significant relationship between parental influence and the academic performance of secondary school students in physics, was rejected. Therefore, parental influence is a statistically significant predictor of secondary school students' academic performance in physics.

3.5. Discussion of the Findings

Evidence of parental influence on the academic performance of secondary school students in physics in Gusau, Zamfara State, based on the data collected for this study. Findings revealed a direct influence of parental style on the academic performance of secondary school students in physics. Inferences showed that the academic performance of secondary school students in physics is highly influenced by parental style. These findings are consistent with previous research demonstrating that parenting style and parental support significantly influence learners' performance in Physics (Ugwuanyi et al., 2020). Furthermore, previous studies have reported that an authoritative parenting style positively predicts learners' academic achievement (Samina et al., 2014; Argyriou et al., 2016). Similarly, authoritative parenting style and student motivation have been found to be significantly associated with learners' academic achievement, whereas neglectful parenting style has been negatively associated with academic achievement (Mihret et al., 2019).

The findings also indicated an association between parental support and the academic performance of secondary school students in Physics. However, the relationship was not statistically significant, suggesting that parental support did not have a substantial influence on students' academic performance in this study. Although previous research has established that parenting style and parental support play significant roles in learners' performance in Physics (Ugwuanyi et al., 2020), other studies have demonstrated a significant positive relationship between parental support and students' academic performance (Akomolafe & Adesua, 2016). Similarly, parental support has been reported to contribute significantly to the development of positive academic skills among school learners (Hill & Tyson, 2009). Nevertheless, the findings of the present study suggest that the influence of parental support on students' academic performance in Physics was relatively weak. This may indicate that secondary school students in Gusau received limited academic support from their parents. Such limited support may be associated with contextual factors, including family, community, and cultural influences (Reschly & Christenson, 2019), as well as inadequate learning resources at home and insufficient parental monitoring, supervision, expectations, and motivational support (Zhang et al., 2022). Therefore, parents are encouraged to provide greater academic support to their children to improve their academic performance.

Furthermore, the findings revealed that parental involvement had a direct influence on the academic performance of secondary school students in Physics. This indicates that parental involvement plays an important role in supporting students' academic achievement in the subject. These findings are supported by previous research reporting a positive relationship between parental involvement in early literacy acquisition and students' achievement in science, with parental involvement accounting for 28% of the variance in science achievement (Oludipe, 2016). Similarly, a statistically significant association has been identified between students' academic performance and parental involvement, occupation, and family size (Darko-Asumadu & Sika-Bright, 2021). Other studies have also demonstrated that parental involvement improves learners' performance in school activities and is significantly associated with children's academic achievement (Ravik et al., 2013; Karbach et al., 2013). Furthermore, the relationship between parental involvement and adolescents' academic achievement has been highlighted in previous research (Ming-Te & Sheikh-Khali, 2014). The positive contribution of home-based parental involvement to learners' academic achievement has also been established, while active parental participation in children's school activities has been identified as an important factor in achieving better educational outcomes (Nurit, 2013; Kadar-Satat et al., 2017). In addition, research in STEM education has consistently emphasized the influential role of parenting in students' academic achievement (Gülhan, 2023; Chen et al., 2022; Dotterer, 2021).

Finally, the findings revealed that parental influence, represented by the linear combination of parental style, parental support, and parental involvement, was significantly related to the academic performance of secondary school students in Physics. This suggests that parental influence constitutes an important factor associated with students' academic achievement in the subject. These findings are consistent with previous studies demonstrating that parental factors play a significant role in students' academic performance (Enbeyle et al., 2020; Bamisaye & Williams, 2016; Smart, 2015; Okunamiri et al., 2010). Specifically, parental factors such as family income, financial provision for basic and educational needs, parental occupation, family size, educational attainment, and motivational support have been found to significantly influence students' academic performance (Enbeyle et al., 2020). Similarly, a positive correlation has been identified between parental influence and the academic performance of students attending school (Pandey & Thapa, 2017). Furthermore, parents' educational levels have been found to correlate positively with their children's academic performance (Smart, 2015). The relationship between parental influence and students' academic achievement has also been established in previous research (Okunamiri et al., 2010).

4. Conclusion

In Nigeria, students' academic performance in Physics in Nigeria has remained poor over time, posing a persistent challenge to educational stakeholders seeking to improve learning outcomes. The present study sought to investigate the contributions of parenting on the academic performance of secondary school students in physics. Hence, the study found a direct influence of parenting style, parental support, and parental involvement on secondary school students' academic performance in physics. The academic performance of secondary school students in physics is significantly influenced by parenting style and parental involvement, whereas parental support has no statistically significant influence. Therefore, the study concluded with some suggestions to education stakeholders, especially parents. It implies that parents should learn a good style of parenting and provide more academic support to their children to improve their academic performance in secondary school Physics, especially in Gusau, Zamfara State. Recommendations, considering the findings of this study, the following recommendations were made:

Parents should learn a good style of parenting so that secondary school performance in physics could be enhanced, especially in Gusau, Zamfara State, since parenting style played a significant role in the performance of secondary school students' performance.

Parents should improve the academic support provided to their children in secondary school. Parents should not only pay their children's secondary school fees, but they should also buy textbooks for them, monitor their performance, and relieve them of too many activities that could disturb their academic life, since parental support will significantly lead to the development of positive academic skills among school learners.

Parents should become more involved in the academics of their children, especially secondary school students. Parents should guide, encourage, and give secondary school students maximum attention regarding academics. They should approve or increase the acceptance of their children's educational activities and aspirations of their children. They should make decisions that will promote their children's academic performance and care for their physical well-being.

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All authors have equal contributions to the paper. All the authors have read and approved the final manuscript.

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