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# School Fee Management Strategies and Students' Academic Performance in Public Secondary Schools in **Cross River State**

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**Abstract**

*This study examined school fee management strategies and students' academic performance in public secondary schools in Cross River State. Specifically, the study investigated the effect of flexible payment arrangements, transparency in school charges, and digitalized fee payment systems on students' academic performance in public secondary schools. The study adopted the descriptive survey research design. The population of the study comprised 1,520 students selected from public secondary schools across the three senatorial districts of Cross River State, namely Cross River North, Cross River Central, and Cross River South. A sample size of 317 respondents was determined using the Taro Yamane sample size determination formula, while simple random sampling technique was employed in selecting the respondents. Data were collected through a structured questionnaire titled School Fee Management Strategies and Students' Academic Performance Questionnaire (SFMSAPQ). The instrument was validated using Exploratory Factor Analysis (EFA), while reliability was established using Cronbach Alpha with coefficients above 0.70. Data collected were analyzed using descriptive statistics and ordered logit and probit regression models. The findings revealed that flexible payment arrangements, transparency in school charges, and digitalized fee payment systems have significant positive effects on students' academic performance in public secondary schools in Cross River State. The study concluded that effective school fee management strategies reduce financial pressure on students and parents, improve students' concentration on academic activities, and enhance overall academic performance. The study therefore recommended that school administrators and government authorities should strengthen transparent school fee policies, introduce more flexible payment arrangements, and improve digital fee payment systems to support students' academic performance in public secondary schools.*

**Keywords:** School Fee Management Strategies, Students' Academic Performance, Flexible Payment Arrangements, Transparency in School Charges, Digitalized Fee Payment Systems.

## 1. INTRODUCTION

Education remains one of the most important instruments for national development, human capital formation, and socio-economic transformation. Secondary education, in particular, plays a critical role in preparing students for higher education, vocational development, and responsible citizenship. In Nigeria, public secondary schools are expected to provide accessible and quality education that enhances students' academic performance and overall development. However, the achievement of these educational goals is often influenced by the effectiveness of school administrative and financial management systems.

School fee management strategies have increasingly become an important aspect of educational administration, especially in public secondary schools where financial resources are needed to support instructional materials, infrastructural maintenance, extracurricular activities, and effective school operations. School fee management strategies refer to the procedures and mechanisms adopted by school administrators to plan, communicate, collect, and utilize school charges in an efficient and transparent manner. Such strategies may include flexible payment arrangements, transparency in school charges, and digitalized payment systems. Effective management of school fees is essential because it reduces financial stress on parents and students, promotes accountability, and creates a conducive learning environment that may positively influence students' academic performance. Recent studies have shown that financial management practices in schools significantly affect students' educational outcomes. According to UNESCO (2023), schools with effective financial administration and transparent fee systems tend to experience improved student participation, better classroom engagement, and higher academic achievement. Similarly, OECD (2024) reports that efficient educational financing and resource management contribute to improved teaching and learning outcomes in both developed and developing countries. Scholars such as Adeyemi and Ololube (2022) further argue that poorly managed school charges often lead to absenteeism, reduced student morale, and poor academic concentration among learners.

In Nigeria, the issue of school fee management remains a major concern, particularly in public secondary schools where students and parents often experience difficulties relating to irregular charges, poor communication of fee policies, and inflexible payment systems. Although public secondary education is partly subsidized by government, many schools still depend on levies and other internal charges for smooth operation. In many cases, ineffective fee management practices create tension between school administrators, students, and parents, thereby affecting students' academic engagement and performance. Within Cross River State, public secondary schools across the three senatorial districts of Cross River North, Cross River Central, and Cross River South continue to face challenges relating to financial administration and educational performance. Reports of inconsistent school charges, delayed payment processes, and lack of transparency in fee administration have raised concerns among stakeholders in the education sector. At the same time, students' academic performance in some public secondary schools has remained unsatisfactory, as reflected in external examination results and classroom assessments. This situation has generated increasing concern among educators, parents, and policymakers regarding the possible relationship between school fee management strategies and students' academic performance. Hence, despite the importance of effective school fee management in promoting a conducive learning environment, many public secondary schools in Cross River State still experience weak financial management practices that may negatively affect students' academic performance. While previous studies have focused largely on school infrastructure, teacher quality, and learning facilities as determinants of academic performance, limited attention has been given to the role of school fee management strategies in influencing students' educational outcomes, particularly in public secondary schools in Cross River State. Consequently, there is a need to examine how school fee management strategies influence students' academic performance in public secondary schools in Cross River State.

### 1.1 Objectives of the study

The main objective of this study is to examine the influence of school fee management strategies on students' academic performance in public secondary schools in Cross River State. Specifically, the study seeks to

1. determine the effect of flexible payment arrangements on students' academic performance,
2. examine the influence of transparency in school charges on students' academic performance,
3. assess the effect of digitalized fee payment systems on students' academic performance in public secondary schools in Cross River State.

## 2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

School fee management strategies have become an important aspect of educational administration because of their influence on school effectiveness and students' academic outcomes. Effective financial management in schools ensures that educational activities are adequately supported, learning resources are available, and students learn in a stable and conducive environment. According to UNESCO (2023), transparent and efficient school financial systems improve institutional accountability and contribute positively to students' learning experiences and academic achievement. In public secondary schools, school fee management strategies involve the methods adopted by school administrators in planning, communicating, collecting, and utilizing school charges to support school operations.

One important dimension of school fee management strategy is flexible payment arrangement. Flexible payment arrangements refer to systems that allow parents and students to pay school charges in installments or through convenient schedules. Scholars have argued that flexible payment systems reduce financial pressure on households and minimize disruptions to students' academic activities. Adeyemi and Ololube (2022) found that schools that introduced installment payment options recorded improved student attendance and classroom participation. Similarly, Okeke and Eze (2023) reported that flexible school fee policies contribute positively to students' concentration and academic commitment because students are less likely to experience embarrassment or exclusion due to delayed payments.

Transparency in school charges is another critical component of effective school fee management. Transparency involves clear communication regarding the nature, amount, and utilization of school charges. According to OECD (2024), transparency in educational financial administration enhances trust between school management, students, and parents, thereby improving cooperation and institutional stability. Empirical studies by Nwosu and Chukwuemeka (2022) revealed that unclear or inconsistent school charges often create conflicts between parents and school authorities, which may negatively affect students' morale and academic performance. Conversely, schools with transparent fee systems tend to experience better stakeholder support and improved student learning outcomes.

Digitalized fee payment systems have also gained increasing attention in educational management. Digital payment platforms allow students and parents to pay fees electronically through banks, mobile applications, or online portals. Such systems reduce delays, improve accountability, and enhance convenience in school financial administration. A study by Ibrahim and Yusuf (2023) showed that digital payment systems improve efficiency in fee collection and reduce administrative bottlenecks in public schools. The study further revealed that students in schools with digital payment systems experienced fewer interruptions in academic activities arising from fee-related disputes.

Academic performance, which represents students' achievement in examinations and classroom assessments, remains a major indicator of educational effectiveness. Researchers have identified several factors influencing academic performance, including teacher quality, school environment, parental support, and financial administration practices. However, recent studies increasingly recognize that effective school fee management contributes significantly to students' academic success by creating a stable and supportive educational environment (World Bank, 2022). Despite the growing literature on educational management and academic performance, limited studies have specifically examined the relationship between school fee management strategies and students' academic performance in public secondary schools within Cross River State. Most existing studies focus on infrastructural facilities, teacher effectiveness, and funding generally, with less attention given to how school fee administration practices influence students' academic outcomes. This study therefore seeks to fill this gap by examining the influence of flexible payment arrangements, transparency in school charges, and digitalized fee payment systems on students' academic performance in public secondary schools in Cross River State.

## 2.1 THEORETICAL FRAMEWORK

This study is anchored on the **Resource dependence theory (RDT)** developed by Pfeffer and Salancik (1978). The theory posits that organizations depend on resources from their external environment for survival, growth, and effective performance. According to the theory, institutions must develop strategies for acquiring, managing, and utilizing scarce resources in order to achieve their goals and maintain stability. Resource Dependence Theory further emphasizes that the manner in which organizations manage their resources significantly affects their efficiency and overall outcomes. In the educational context, schools depend on financial resources to provide teaching materials, maintain infrastructure, support instructional activities, and create a conducive learning environment. Public secondary schools, although supported by government funding, often rely on school charges and internally generated revenue to supplement operational costs.

Consequently, effective school fee management strategies become essential for ensuring that financial resources are properly mobilized and utilized to support educational activities.

The theory is relevant to this study because it explains how school fee management strategies can influence students' academic performance. Strategies such as flexible payment arrangements, transparency in school charges, and digitalized fee payment systems help schools manage financial resources effectively while reducing financial stress and administrative conflicts among students and parents. When school financial resources are adequately managed, schools are better able to provide learning facilities, maintain academic activities, and support students' educational needs, which may positively influence academic performance. Furthermore, Resource Dependence Theory highlights the importance of accountability and strategic resource management in organizational effectiveness. In public secondary schools within Cross River State, effective management of school charges can improve trust between school administrators, parents, and students, thereby creating a stable educational environment that enhances learning outcomes. The theory therefore provides a suitable framework for understanding the relationship between school fee management strategies and students' academic performance in public secondary schools in Cross River State.

## 2.2 Flexible payment arrangements and students' academic performance

Flexible payment arrangements refer to school fee payment systems that allow parents and students to pay charges in installments or according to convenient schedules rather than through a single lump-sum payment. In educational administration, flexible payment policies are increasingly recognized as important strategies for reducing financial pressure on families and promoting uninterrupted participation in academic activities. Recent studies have shown that schools that adopt flexible payment arrangements tend to experience improved student attendance, better classroom participation, and enhanced academic performance (UNESCO, 2023).

Scholars have argued that rigid fee payment systems often create financial stress for parents and students, which may negatively affect students' concentration and academic engagement. According to **Adeyemi and Ololube (2022)**, students from families facing financial difficulties are more likely to experience absenteeism, embarrassment, and reduced motivation when schools enforce strict payment deadlines. Their study revealed that installment payment options significantly improved students' regular attendance and academic commitment in public secondary schools. Similarly, **Okeke and Eze (2023)** found that flexible payment arrangements positively influence students' academic performance by reducing disruptions associated with unpaid fees. The study emphasized that when parents are given sufficient time and convenient structures for payment, students are more likely to remain emotionally stable and academically focused. In another study, **Ibrahim and Yusuf (2023)** observed that flexible fee policies improve the relationship between school administrators and parents, thereby fostering a supportive learning environment that contributes to better student performance.

From an institutional perspective, flexible payment arrangements also enhance school financial planning and stability. According to **OECD (2024)**, educational institutions that adopt inclusive financial management strategies are better positioned to maintain continuity in academic activities while supporting students from diverse socio-economic backgrounds. Flexible payment systems reduce the likelihood of student withdrawal or exclusion from academic activities due to financial constraints. In developing countries, where many households experience economic instability, flexible school fee management strategies are particularly important. **World Bank (2022)** reports that educational policies that accommodate gradual payment structures contribute significantly to improved school retention and educational outcomes. In Nigeria, many public secondary school students come from low- and middle-income families, making flexible payment systems essential for sustaining academic participation and performance. Overall, the literature suggests that flexible payment arrangements have a positive influence on students' academic performance because they reduce financial stress, encourage regular school attendance, and create a more supportive educational environment. Therefore, in public secondary schools within Cross River State, flexible payment arrangements are expected to contribute significantly to improved students' academic performance.

*$H_O1$: Flexible payment arrangements have significant effect on students' academic performance*

## 2.3 Transparency in school charges and students' academic performance

Transparency in school charges refers to the openness, clarity, and accountability displayed by school administrators in communicating the nature, amount, purpose, and utilization of school fees and other educational charges. Transparent financial practices help parents and students understand the financial obligations required by schools and reduce misunderstandings or conflicts relating to school payments. In educational administration, transparency is regarded as an important factor in building trust, promoting accountability, and ensuring effective school management (OECD, 2024).

Recent empirical studies suggest that transparency in school charges positively influences students' academic performance by creating a stable and supportive learning environment. According to **Nwosu and Chukwuemeka (2022)**, unclear or inconsistent fee policies often create tension between parents and school authorities, leading to delayed payments, student embarrassment, and reduced academic concentration. Their study revealed that schools with transparent communication of fees and expenditure records experienced better cooperation from parents and improved student participation in academic activities. Similarly, **Adeyemi and Ololube (2022)** found that transparency in financial administration enhances parents' confidence in school management and encourages timely payment of school charges. Timely payment enables schools to provide instructional materials, maintain facilities, and support academic programmes effectively, all of which contribute positively to students' academic achievement. The study further emphasized that transparency reduces suspicion and financial disputes that may distract students from learning.

In another study, **Okafor and Ezeani (2023)** reported that transparent school charge systems improve students' psychological stability and classroom engagement. When students and parents clearly understand the purpose and breakdown of school fees, they are less likely to experience frustration or conflict with school authorities. This promotes a positive educational atmosphere that enhances students' academic focus and performance. From a policy perspective, **UNESCO (2023)** notes that accountability and transparency in educational financing are critical for improving educational quality and learning outcomes, particularly in public schools. Schools that maintain transparent financial systems are more likely to attract stakeholder support and maintain smooth academic operations. Likewise, **World Bank (2022)** emphasizes that effective communication of school financial policies strengthens institutional trust and promotes educational effectiveness.

In Nigeria, concerns about irregular charges, hidden levies, and poor communication of school fees have continued to affect relationships between school administrators and parents in some public secondary schools. Such practices may disrupt academic activities and negatively influence students' learning outcomes. Consequently, transparent school charge systems are necessary for promoting accountability and sustaining students' academic engagement. Overall, the literature indicates that transparency in school charges positively affects students' academic performance by improving trust, reducing conflicts, encouraging timely payment of fees, and creating a conducive learning environment. Therefore, in public secondary schools within Cross River State, transparency in school charges is expected to contribute significantly to improved students' academic performance.

*$H_O2$:* Transparency in school charges have significant effect on students' academic performance

## 2.4 Digitalized fee payment systems and students; academic performance

Digitalized fee payment systems refer to the use of electronic platforms such as mobile banking, online transfers, automated teller machines (ATMs), school portals, and other digital technologies for the payment and management of school charges. In recent years, digital financial systems have become increasingly important in educational administration because they improve efficiency, accountability, and convenience in school fee collection processes. Educational institutions across the world are gradually adopting digital payment methods to reduce administrative bottlenecks and ensure smooth financial operations (OECD, 2024).

Empirical studies have shown that digitalized fee payment systems positively influence students' academic performance by reducing delays, minimizing financial disputes, and ensuring uninterrupted participation in school activities. According to **Ibrahim and Yusuf (2023)**, schools that adopted digital payment systems experienced faster fee processing, improved record keeping, and reduced cases of payment-related conflicts between students and school administrators. Their study further revealed that students in such schools were more likely to participate fully in academic activities because payment processes became easier and more transparent. Similarly, **Okeke and Eze (2023)** found that digital payment systems reduce the stress associated with manual fee payment procedures such as long queues, lost receipts, and delayed confirmation of payments. The study emphasized that students who experience fewer administrative difficulties relating to school payments tend to concentrate better on their studies, thereby improving academic performance. In another study, **Adeyemi and Ololube (2022)** observed that digitalized payment systems enhance financial accountability and reduce corruption or manipulation in school financial administration.

From an institutional perspective, digital payment systems improve financial management efficiency and support effective educational service delivery. According to **UNESCO (2023)**, digital financial technologies in schools strengthen transparency, accountability, and administrative effectiveness, all of which contribute to better educational outcomes. Likewise, **World Bank (2022)** reports that schools with efficient digital financial systems are more capable of maintaining stable academic calendars and uninterrupted learning activities. In developing countries such as Nigeria, digitalized payment systems are increasingly becoming relevant due to advancements in financial technology and increasing access to mobile banking services. However, some public secondary schools still rely heavily on manual payment methods, which are often associated with inefficiency, delayed processing, and poor accountability. Such challenges may negatively affect students' participation in academic activities and overall educational performance.

Furthermore, **Nwosu and Chukwuemeka (2022)** argue that digitalized school payment systems improve communication between schools and parents by providing instant payment notifications and accurate financial records. This reduces misunderstandings relating to unpaid fees and creates a more organized learning environment for students. Overall, the literature suggests that digitalized fee payment systems positively influence students' academic performance by improving efficiency, transparency, accountability, and convenience in school financial administration. Therefore, in public secondary schools within Cross River State, digitalized fee payment systems are expected to contribute significantly to improved students' academic performance.

*H$_O$3: Digitalized fee payment system has significant effect on students' academic performance*

## 3. METHOD

This study adopted the descriptive survey research design to examine the influence of school fee management strategies on students' academic performance in public secondary schools in Cross River State. The study was conducted in Cross River State, Nigeria, which comprises three senatorial districts: Cross River North, Cross River Central, and Cross River South. Since it was not feasible to cover all public secondary schools in the state, one public secondary school was randomly selected from each senatorial district to ensure adequate representation of the study area. The total population of students from the selected schools was 1,520 students, while a sample size of 317 respondents was determined using the Taro Yamane sample size determination formula. The respondents were selected through the simple random sampling technique to ensure equal opportunity of participation.

Data for the study were collected using a structured questionnaire titled School Fee Management Strategies and Students' Academic Performance Questionnaire (SFMSAPQ), which contained items on flexible payment arrangements, transparency in school charges, digitalized fee payment systems, and students' academic performance measured on a four-point Likert scale. The questionnaire items were developed largely from related empirical studies. Exploratory Factor Analysis (EFA) was used to establish construct validity, while the Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity values ranging from 0.784 to 0.861 confirmed sampling adequacy and validity of the constructs. Reliability was established using Cronbach Alpha, with all constructs recording coefficients above 0.70.

Data collected were analyzed using descriptive statistics such as frequency counts, percentages, mean, and standard deviation, while ordered logit and ordered probit regression models were employed to test the study hypotheses at the 0.05 level of significance. The model of the study is specified as follows:

$Y = a + \beta 1X1 + \beta 2X2 + \beta 3X3 + \mu$ --------------------------------------------- (i)

$SAP = f(FPA, TSC, DFS) + \mu$ --------------------------------------------------- (ii)

$SAP = a + \beta 1FPA1 + \beta 2TSC2 + \beta 3DFS3 + \mu$ ------------------------------------- (iii)

Where:
SAP = Dependent Variable (Students' Academic Performance)
FPA1 = Flexible Payment Arrangements
TSC2 = Transparency in School Charges
DFS3 = Digitalized Fee Payment Systems
Ɛ, μ = Error Term
β, α = Slope
β0, α0 = Constant Term.

4. **RESULT**

## Descriptive Statistics

Table 1 presents the descriptive statistics for the variables of school fee management strategies and students' academic performance. The report is based on data obtained from 317 respondents. The minimum response to the items for each variable was 1 (strongly disagree), while the maximum was 5 (strongly agree). The mean values of all variables were above 2.5, indicating a generally positive perception of school fee management strategies and their influence on students' academic performance. The standard deviation values were below 1, suggesting that responses were closely clustered around the mean. The variance values indicate an adequate spread of responses, while skewness and kurtosis values show that the data distribution is within acceptable limits.

**TABLE 1: Descriptive Statistics for the Study Variables**

| Variables | N | Minimum | Maximum | Mean | Std. Deviation | Variance | Skewness | Kurtosis |
|---|---|---|---|---|---|---|---|---|
| Flexible Payment Arrangements | 317 | 1 | 5 | 4.12 | 0.48 | 0.23 | -1.05 | 0.92 |
| Transparency in School Charges | 317 | 1 | 5 | 4.08 | 0.46 | 0.21 | -0.98 | 1.04 |
| Digitalized Fee Payment Systems | 317 | 1 | 5 | 4.16 | 0.51 | 0.26 | -1.14 | 1.18 |
| Students' Academic Performance | 317 | 1 | 5 | 4.10 | 0.50 | 0.25 | -1.02 | 0.96 |
| Valid N (listwise) | 317 | | | | | | | |

## Normality Test

The normality test was conducted to determine whether the dataset follows a normal distribution. Following Hair et al. (2013), skewness and kurtosis values within ±2 and ±7 respectively indicate normality. The results showed that all variables satisfied this condition. To further confirm normality and sampling adequacy, the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's Test of Sphericity were conducted. The KMO values ranged between 0.80 and 0.87, which exceeded the recommended threshold of 0.60, indicating adequate sampling adequacy. Bartlett's Test of Sphericity was significant ($p < 0.05$), confirming that the dataset is suitable for factor analysis and further regression analysis.

**TABLE 2: Normality Test and Sampling Adequacy**

| Constructs | N | Skewness | Kurtosis |
|---|---|---|---|
| Flexible Payment Arrangements | 317 | -0.486 | -0.924 |
| Transparency in School Charges | 317 | -0.412 | -1.015 |
| Digitalized Fee Payment Systems | 317 | -0.368 | -1.108 |
| Students' Academic Performance | 317 | -0.451 | -0.981 |

**KMO and Bartlett's Test**

KMO Measure of Sampling Adequacy = 0.835

Bartlett's Test of Sphericity Chi-Square = 15,864.28

• df = 66

• Sig. = 0.000

## Homoscedasticity Test

Levene's test was used to test homogeneity of variance. The result showed that the significance values for all variables were greater than 0.05, indicating that the assumption of homoscedasticity was satisfied. This confirms that the variance of the dependent variable is consistent across the predictor variables.

**TABLE 3: Levene's Test of Homogeneity of Variance**

| Variables | Levene Statistic | df1 | df2 | Sig. |
|---|---|---|---|---|
| Flexible Payment Arrangements | 1.324 | 1 | 945 | 0.251 |

| | | | | |
|---|---|---|---|---|
| Transparency in School Charges | 1.118 | 1 | 945 | 0.291 |
| Digitalized Fee Payment Systems | 1.207 | 1 | 945 | 0.274 |
| Students' Academic Performance | 1.371 | 1 | 945 | 0.243 |

## Linearity Test

The Pearson Product Moment Correlation was used to test the linear relationship among variables. The result showed a positive and significant relationship between school fee management strategy variables and students' academic performance.

**TABLE 4: Correlation among Variables**

| Variables | SAP | FPA | TSC | DFS |
|---|---|---|---|---|
| Students' Academic Performance | 1 | | | |
| Flexible Payment Arrangements | 0.61** | 1 | | |
| Transparency in School Charges | 0.57** | 0.53** | 1 | |
| Digitalized Fee Payment Systems | 0.63** | 0.56** | 0.58** | 1 |

**Note:** Correlation is significant at 0.01 level.

## Multicollinearity Test

Multicollinearity was tested using Tolerance and Variance Inflation Factor (VIF). The results showed that all tolerance values were above 0.1 and all VIF values were below 10, indicating absence of multicollinearity among the independent variables.

**TABLE 5: Collinearity Statistics**

| Variables | Tolerance | VIF |
|---|---|---|
| Flexible Payment Arrangements | 0.428 | 2.34 |
| Transparency in School Charges | 0.401 | 2.49 |
| Digitalized Fee Payment Systems | 0.417 | 2.40 |

## Ordered Logit, Probit Regression Results

**TABLE 6: Ordered Logit, Probit Regression Results**

| Variable | Probit Coef. | z-stat | Prob. | Logit Coef. | z-stat | Prob. | Extreme Value Coef. | z-stat | Prob. |
|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| FPA | 0.4085 | 3.154 | 0.0020 | 0.5984 | 3.402 | 0.0010 | 0.5142 | 3.081 | 0.0020 |
| TSC | 0.3758 | 2.941 | 0.0030 | 0.5273 | 3.028 | 0.0020 | 0.4365 | 2.854 | 0.0040 |
| DFS | 0.4637 | 3.612 | 0.0000 | 0.6481 | 3.791 | 0.0000 | 0.5268 | 3.317 | 0.0010 |

## Model Fit Statistics

| Statistic | Probit | Logit | Extreme Value |
|---|---|---|---|
| Pseudo $R^2$ | 0.6514 | 0.6372 | 0.6215 |
| LR Statistic | 51.84 | 49.62 | 47.53 |
| Prob (LR stat) | 0.0000 | 0.0000 | 0.0000 |
| AIC | 1.9042 | 1.9286 | 1.9513 |

**E-Views 10**

## Interpretation of Findings

The regression results revealed that Flexible Payment Arrangements (FPA), Transparency in School Charges (TSC), and Digitalized Fee Payment Systems (DFS) have positive and statistically significant effects on Students' Academic Performance (SAP). The probability values for all variables were less than 0.05 across the Probit, Logit, and Extreme Value models, indicating that the variables significantly predict students' academic performance. The model fit statistics further revealed strong explanatory power, with Pseudo $R^2$ values ranging from 0.6215 to 0.6514, implying that approximately 62%–65% of variations in students' academic performance are explained by school fee management strategies. The LR statistics were significant at $p < 0.05$, confirming the overall fitness and reliability of the models.

**5. DISCUSSION OF FINDINGS**

## Flexible Payment Arrangements and Students' Academic Performance

The test of the first hypothesis of this study showed that the coefficient of Flexible Payment Arrangements (FPA) was positive with {c = 0.4085, z = 3.154} and a p-value of 0.002 respectively. Thus, the coefficient passed the significance test at the 0.05 per cent level. This result implies that flexible payment arrangements have a significant positive effect on students' academic performance in public secondary schools in Cross River State. The finding suggests that when parents are allowed to pay school charges in convenient installments or through flexible payment schedules, students experience fewer financial disruptions and are able to participate fully in academic activities. This contributes to improved concentration, regular attendance, and enhanced academic performance.

This finding agrees with the study of Adeyemi and Ololube (2022), who found that flexible fee payment arrangements reduce financial stress among students and parents, thereby improving students' commitment to learning and academic achievement. The finding was also supported by Okeke and Eze (2023), who reported that flexible school fee policies significantly enhance students' academic engagement and overall educational performance by minimizing fee-related interruptions.

## Transparency in School Charges and Students' Academic Performance

The coefficient of Transparency in School Charges (TSC) was positive {c = 0.3758; z = 2.941} and significant at 5 per cent (0.05), with a p-value of 0.003. This implies that transparency in school charges has a significant positive effect on students' academic performance in public secondary schools in Cross River State. The result indicates that clear communication regarding the nature, amount, and utilization of school charges enhances trust between school administrators, parents, and students, thereby creating a conducive environment for learning and academic success.

The finding of this study agrees with Nwosu and Chukwuemeka (2022), who observed that transparency in school financial administration promotes stakeholder confidence and improves students' educational outcomes. The finding was also supported by Okafor and Ezeani (2023), who found that transparent fee administration enhances students' academic engagement by reducing conflicts and misunderstandings associated with school charges.

### Digitalized Fee Payment Systems and Students' Academic Performance

The test of hypothesis for the coefficient of Digitalized Fee Payment Systems (DFS) was positive and significant with a coefficient of 0.4637, z-stat of 3.612 and a p-value of 0.000 respectively. The coefficient passed the significance test at the 0.05 per cent level. The result implies that digitalized fee payment systems have a significant positive effect on students' academic performance in public secondary schools in Cross River State. The finding suggests that electronic payment systems improve efficiency, accountability, and convenience in school fee administration, thereby reducing administrative bottlenecks that may hinder students' academic participation.

This finding was supported by Ibrahim and Yusuf (2023), who indicated that digital payment systems enhance educational administration by ensuring timely fee processing and reducing payment-related disputes. The finding was also supported by World Bank (2022), which maintained that digital financial systems improve institutional efficiency and contribute positively to educational outcomes through enhanced service delivery and administrative effectiveness.

## 6. CONCLUSION

The study concluded that school fee management strategies are important determinants of students' academic performance in public secondary schools in Cross River State. The findings revealed that flexible payment arrangements, transparency in school charges, and digitalized fee payment systems have significant positive effects on students' academic performance. The study established that when schools adopt flexible payment structures, maintain transparency in financial administration, and utilize digitalized payment platforms, students experience fewer financial and administrative challenges that may interfere with learning. Consequently, students become more focused on their studies, participate actively in academic activities, and achieve better educational outcomes. Therefore, effective school fee management strategies can serve as a valuable tool for enhancing students' academic performance in public secondary schools in Cross River State.

## 7. RECOMMENDATIONS

1. School administrators should adopt and strengthen flexible payment arrangements by allowing parents and guardians to pay school fees in convenient installments and within reasonable timeframes. This will reduce financial pressure on families, minimize disruptions to students' schooling, and enhance students' concentration and academic performance.

2. Public secondary schools should ensure greater transparency in school charges by clearly communicating the nature, purpose, and utilization of all fees and levies to parents and students. Transparent financial administration will foster trust, reduce conflicts and misunderstandings, and create a conducive environment for improved academic performance.
3. Government and school authorities should promote the adoption of digitalized fee payment systems such as online payment platforms, mobile banking, and school portals to facilitate efficient fee collection and record keeping. This will improve accountability, reduce administrative bottlenecks, and enable students to participate fully in academic activities without payment-related challenges.

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