



HUMAN RESOURCE NEEDS OF TEACHERS' AND STUDENTS' ACADEMIC PERFORMANCE IN PUBLIC SENIOR SECONDARY SCHOOLS IN RIVERS STATE

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ABSTRACT

This study investigated the human resource needs of teachers and their influence on students' academic performance in public senior secondary schools in Rivers State. A descriptive and correlational research design was adopted to examine the relationships among key human resource components like teacher adequacy, quality, and instructional capacity and students' academic performances. The population comprised 6,893 teachers across 302 government-owned senior secondary schools, as documented by the Rivers State Senior Secondary Schools Board (2022). Using simple random sampling, 10.6% of the population, representing 712 teachers, was selected to ensure broad and unbiased representation across the 23 local government areas. Data were collected using a self-developed instrument titled "Human Resource Needs and Academic Performance Questionnaire (HRNAPQ)", structured into three sections capturing demographic data, human resource needs, and academic performance indicators. The instrument was validated by experts in measurement and evaluation, and reliability was confirmed through the Cronbach Alpha method, yielding an internal consistency coefficient of .780. Administration of the questionnaire was facilitated by two trained research assistants, achieving a high retrieval rate of 97%. Data analysis involved descriptive statistics (mean and standard deviation) for answering research questions and linear regression for testing hypotheses at a .05 significance level using SPSS version 25. The findings from the study provided evidence-based insights on the overall agreement that the human resource need of adequacy of teachers positively influences students' academic performance in public senior secondary schools in Rivers State. The study recommended that the Ministry of Education should devise and implement targeted recruitment strategies aimed at attracting highly qualified teachers and in adequate numbers in public secondary schools.

Keywords: Human Resource Needs, Teachers', Students', Academic Performance, Public, Senior, Secondary Schools, Rivers State, Nigeria.

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INTRODUCTION

Human resources in education are principally the quality of teacher recruitment, training, distribution and ongoing professional development, which are central determinants of student learning outcomes. A large body of evidence (e.g., Blank, 2009; Franklin, 2025) shows that well-designed teacher professional development (PD) and appropriate staffing levels produce measurable gains in pupil achievement, particularly when PD is sustained, content-focused, and linked to classroom practice.

Teacher competence and continuous PD matter because they change instructional quality. Meta-analytic reviews find consistent positive effects of effective PD on student achievement, especially when training targets subject pedagogy, uses active learning, and includes follow-up coaching or collaborative professional learning communities (Blank, 2009; Samsudin, 2024; Franklin, 2025). UNESCO also highlighted that coherent policies for recruitment, deployment, and career-long learning are foundational to raising teaching quality and student outcomes (UNESCO, 2025). For Rivers State, investing in regular, curriculum-aligned PD (with assessment literacy and classroom management components) would likely improve examination scores and classroom engagement.

Staffing levels and equitable teacher deployment are another HR constraint. Studies of public secondary schools in Rivers State document large class sizes and uneven teacher distribution, which undermine individualized instruction and increase teacher burnout, both negatively associated with student performance. Likewise, poor physical conditions and under-maintenance of school facilities create an environment that depresses teacher morale and learning time (Osaro, 2018). Strategic human resource planning involve recruiting additional qualified teachers, reducing teacher-pupil ratios, and aligning staff deployment with curricular needs is therefore a necessary complement to PD.

Beyond numbers and training, human resource management practices matter: supervision, appraisal, incentives, and supportive leadership increase teacher effectiveness and retention. Empirical work in Nigerian secondary schools links inadequate supervision and limited capacity-building to poorer student outcomes, indicating that principals' HR roles (mentoring, performance appraisal, and workload distribution) significantly influence achievement (International Policy Brief, 2023). Strengthening school leadership capacity in Rivers State would help translate central PD and recruitment policies into improved classroom practice.

Finally, integrating modern tools like the assessment data systems, targeted in-service modules, and teacher mentoring networks helps make HR interventions more efficient and evidence-driven. Recent Nigerian studies emphasize that digital supports and structured professional learning communities magnify PD effects when the basic HR architecture (sufficient staffing, fair deployment, functioning facilities) is in place (Ogbonnia et al., 2025; Samsudin, 2024).

Therefore, improving students' academic performance in Rivers State public senior secondary schools requires a multi-pronged human resource strategy: recruit and deploy enough qualified teachers, provide sustained subject-focused PD with follow-up, strengthen school leadership and supervision, and upgrade working conditions so teachers can implement improved practices. Policymakers should couple investments in teacher quantity with high-quality, evidence-based PD and stronger HR management to realise durable improvements in student outcomes.

Statement of the Problem

The educational system in Rivers State, Nigeria, presents a complex scenario marked by various challenges in the part of human resource needs and their direct impact on the academic performance of students in public senior secondary schools. Observations highlighted a critical relationship between the adequacy and quality of teachers and academic performance of students in public senior secondary schools. The interconnections within this dynamic, however, pose significant hurdles that necessitate meticulous examination.

One primary concern revolves around the shortage of qualified teachers and administrators, leading to larger class sizes, restricted access to specialized subjects, extracurricular activities, and diminished individualized attention for students. This shortage further extends to support staff, contributing to limited access to counseling services and inadequate maintenance of facilities. The ramifications of these deficiencies echo through the academic trajectory of students, impacting their overall learning experience and academic success.

The inadequacies in human resource capacity within the educational framework of Rivers State highlight a systemic challenge that requires targeted interventions. The multifaceted nature of these challenges demands a comprehensive problem-solving approach, encompassing recruitment, training, and retention strategies for qualified and motivated educators. Additionally, the establishment of support systems, such as mentorship programs and peer-collaboration groups, becomes pivotal in addressing the broader issue of insufficient support staff and promoting a conducive learning environment. In light of these observations, the researcher endeavors to unravel the underlying complexities within the educational system, seeking to answer the following questions: How does the human resource need of adequacy of teachers' enhance students' academic performance in public senior secondary schools in Rivers State? How does the human resource need of quality of teachers' enhance students' academic performance in public senior secondary schools in Rivers State? By delving into these questions, the study aspires to contribute meaningful insights that can inform policy, guide educational practices, and foster an environment where the holistic development of students is prioritized.

Aim and Objectives of the Study

Based on the identified problems, the aim of this study is to examine human resource needs of teachers' and students' academic performance in public senior secondary schools in Rivers State, Nigeria, specifically the researcher designed the study to achieve the following objectives:

- Determine the human resource needs of adequacy of teachers' and students' academic performance in public senior secondary schools in Rivers State.
- Ascertain the human resource need of quality of teachers' and students' academic performance in public senior secondary schools in Rivers State.

Research Questions

In order to achieve the objectives of this study, the under listed eight research questions were raised to guide the study:

- How does the human resource need of adequacy of teachers' enhance students' academic performance in public senior secondary schools in Rivers State?
- How does the human resource need of quality of teachers' enhance students' academic performance in public senior secondary schools in Rivers State?

Hypotheses

In order to achieve the purpose for which the research questions were raised, the under listed eight corresponding hypotheses were raised to further guide the study:

- There is no significant relationship between the human resource need of adequacy of teachers' and students' academic performance in public senior secondary schools in Rivers State.
- There is no significant relationship between the human resource need of quality of teachers' and students' academic performance in public senior secondary schools in Rivers State.

THEORETICAL FRAMEWORK

Human Capital Theory

Gary Becker's Human Capital Theory, originating in 1964, is unequivocally a pivotal cornerstone in the field of educational economics, specifically shedding light on the dynamics between investments in human resources and the ensuing academic performance of students in public senior secondary schools (Kpee, 2019). This lasting theory, as propounded by Becker (1964), goes beyond a mere conceptualization; it unfolds as a comprehensive framework that underscores the indispensable role of education and training as strategic investments, ultimately contributing to the development of human capital and, by extension, enhancing overall productivity and performance within the educational sector.

The strength of the Human Capital Theory becomes profound upon embarking on a detailed investigation of its attributes. Becker's conceptualization revolves around the profound notion of human capital as an asset. This asset is not fixed but dynamic, capable of cultivation and enhancement by both individuals and societies. In this view, education and training emerge as strategic investments, serving as the catalysts for the development of a spectrum of skills, knowledge, and competencies within individuals. In the specific context of the study, this theory serves as a guiding light, prompting a distinct analysis that explores deep into the multifaceted field of how investments in teachers' training and development, their subject-content expertise, and pedagogical skills significantly contribute to the overarching human capital within the educational system.

A closer inspection of Becker's work reveals its far-reaching influence, inspiring a glut of scholarly contributions that collectively solidify the Human Capital Theory as a foundational framework in the expansive field of educational research. Noteworthy scholars, and notably another Nobel laureate in economics, Chinyere O. Agabi, have actively engaged with and extended Becker's foundational ideas. Agabi's significant contribution adds another layer to the theory's applicability by emphasizing the critical interplay between education, human capital, and economic development. Agabi's work, particularly from 2019, reinforces the idea that the

implications of the Human Capital Theory extend beyond the individual level, transcending to societal progress and development (Agabi, 2019).

This study showcases that the Human Capital Theory is not confined to the theoretical musings of Becker alone. Instead, it has evolved into a comprehensive framework enriched by the insights of subsequent scholars. Agabi, in particular, extends and broadens the scope of Becker's ideas. Their research represents more than just an application; it encapsulates a profound exploration into the factors influencing human capital development and their direct impact on academic outcomes within the unique landscape of Nigeria. This contextualization ensures that the exploration of human resource needs is not a detached theoretical exercise but a grounded exploration that considers the specificities of the Nigerian educational milieu.

The Human Capital Theory, as propounded by Gary Becker and enriched by the contributions of subsequent scholars, is not a static conceptualization but a dynamic framework with enduring relevance. Its definitional attributes, the extensive body of scholarly contributions, its direct relevance to the study's objectives, and the far-reaching implications for administration and legal considerations collectively position it as a cornerstone in understanding and improving the educational landscape in public senior secondary schools.

The Human Capital Theory's relevance to the study's objectives is evident in the extensive body of literature contributed by Nigerian scholars like Okoye et al. (2021). Their work explores into the application of the theory in the Nigerian educational context, providing insights into the factors that influence human capital development and its impact on academic outcomes. This local perspective enriches the study, ensuring that the exploration of human resource needs is grounded in the unique challenges and opportunities of the Nigerian educational landscape.

Administratively, the Human Capital Theory underscores the importance of strategic investments in teachers' professional development. Scholars like Kpee (2019) have emphasized the need for continuous teacher training to enhance the quality of education in Nigeria. This aligns with the theory's proposition that ongoing investments in human capital are essential for sustained productivity and growth. Legally, the theory supports the formulation of policies that prioritize education and training, ensuring a legal framework that encourages and supports the development of human capital in the educational sector. Gary Becker's Human Capital Theory, enriched by contributions from scholars like Agabi and Kpee, forms a robust theoretical foundation for the study. Its definitional attributes, contributions from various authorities, relevance to the study's objectives, and implications for administration and legal considerations collectively highlight its significance in shaping the exploration of human resource needs and students' academic performance in public senior secondary schools.

CONCEPTUALIZATION

Adequacy of Teachers and Students' Academic Performance in Public Senior Secondary Schools

The adequacy of teachers represents one of the most fundamental human resource needs influencing students' academic performance in public senior secondary schools. Teacher adequacy extends beyond numerical sufficiency to include appropriate teacher-student ratios, equitable deployment, subject specialization, and the presence of professionally qualified

educators. When these human resource needs are met, schools can deliver more effective instruction, promote learner engagement, and enhance academic achievement (Adebayo, 2020).

One major dimension of teacher adequacy is the teacher–student ratio, which determines the extent of individualized attention students receive. Overcrowded classrooms, which are common in many Nigerian public schools, reduce teachers’ capacity to provide differentiated learning, manage classroom activities effectively, and conduct meaningful assessment (Owoeye & Yara, 2019). Conversely, adequate staffing enables teachers to adopt student-centered pedagogies, provide timely feedback, and support students at different ability levels, leading to improved academic outcomes.

Subject specialization also plays a critical role in determining instructional quality. Schools with insufficient specialist teachers often assign subjects to educators outside their trained fields, resulting in shallow content delivery and limited pedagogical effectiveness. Research shows that students perform significantly better when taught by teachers who are experts in their subject areas (Afolabi & Loto, 2021). Ensuring adequate numbers of subject-specialist teachers in core subjects such as Mathematics, English, Biology, and Chemistry is therefore essential for strengthening curriculum implementation.

Another key human resource need linked to teacher adequacy is workload distribution. When teacher numbers are insufficient, existing staff shoulder excessive workloads that increase stress, reduce preparation time, and hinder effective lesson delivery. High workloads are associated with burnout and diminished instructional quality, both of which negatively affect students’ academic performance (Uche & Okoli, 2022). Adequate staffing helps distribute responsibilities more evenly, enhances teacher motivation, and improves classroom performance.

Teacher adequacy also supports the implementation of remedial programmes, tutorials, mentoring systems, and co-curricular academic activities that contribute to academic improvement. In poorly staffed schools, such support structures are difficult to sustain, depriving students of opportunities for reinforcement and enrichment (Ogunyemi & Adeyemi, 2020).

Additionally, adequate staffing contributes to a positive school climate, which influences teaching effectiveness and student learning. Schools with enough teachers maintain better discipline, stronger administrative coordination, and higher levels of teacher collaboration—all of which support improved academic outcomes (Okeke, 2021). A well-resourced teaching force fosters teamwork, peer mentoring, and shared responsibility for student success.

Finally, teacher adequacy enhances continuous assessment and feedback practices. When staffing levels are appropriate, teachers can monitor student progress effectively, provide detailed feedback, and address learning gaps promptly. Continuous assessment is a proven predictor of academic improvement, but its success depends heavily on manageable class sizes and teacher workload (Nwachukwu, 2023).

The adequacy of teachers is a central human resource need shaping the academic performance of students in public senior secondary schools. Ensuring appropriate staffing levels, subject specialization, equitable deployment, and manageable workloads is essential for improving instructional quality and creating a supportive learning environment. Sustainable government investment and strategic human resource planning are therefore crucial for enhancing students’ academic performance across Rivers State.

Quality of Teachers and Students’ Academic Performance in Public Senior Secondary Schools in Rivers State

The quality of teachers remains one of the most critical human resource needs influencing students' academic performance in public senior secondary schools in Rivers State. Teacher quality encompasses pedagogical competence, subject mastery, professional training, instructional skills, classroom management, and effective use of assessment strategies. Research consistently shows that teacher quality is a stronger predictor of student achievement than school inputs such as infrastructure or learning materials (Afolabi & Loto, 2021; Nwosu, 2020).

A major dimension of teacher quality is professional qualification and subject specialization. Students tend to perform better when taught by teachers who are well-trained in their subject areas and equipped with relevant pedagogical techniques. In many Nigerian public secondary schools, including those in Rivers State, shortages of specialist teachers in Mathematics, English, Biology, Chemistry, and Physics often result in out-of-field teaching, which negatively affects curriculum implementation and learning outcomes (Adebayo, 2020). When qualified and competent teachers are deployed appropriately, instructional delivery improves, leading to better examination performance.

Another important human resource need is continuous professional development (CPD). Teacher quality is not static; it requires ongoing training to update pedagogical skills, assessment techniques, and digital competencies. Studies conducted in Rivers State indicate that teachers who regularly participate in CPD activities demonstrate stronger classroom management, improved lesson planning, and greater confidence in delivering complex subject content (Anunobi, 2025). Structured CPD that includes mentoring, demonstration lessons, peer collaboration, and follow-up monitoring enhances teachers' ability to support diverse learners.

Teaching experience also contributes significantly to teacher quality. Experienced teachers tend to have stronger instructional routines, better understanding of students' learning difficulties, and greater ability to apply differentiated teaching strategies. According to Uche and Okoli (2022), experienced teachers positively influence student learning because they are more adept at integrating assessment with instruction, managing large classes, and adapting lessons to varying ability levels.

Teacher quality is equally linked to working conditions and instructional resources. Poor conditions of service such as inadequate instructional materials, limited laboratory equipment, and heavy workloads reduce teachers' motivation and instructional effectiveness. Ogunyemi and Adeyemi (2020) assert that teachers working in resource-deprived environments are less likely to implement student-centered learning strategies or provide individualized support. Conversely, when teachers have access to adequate teaching materials, supportive leadership, and manageable class sizes, instructional quality improves.

Additionally, instructional supervision and school leadership directly influence teacher quality. Effective principals provide professional support through monitoring, feedback, classroom observation, and allocation of teaching resources. Schools with strong leadership demonstrate higher instructional quality and better student outcomes because supervision strengthens teacher accountability and fosters continuous improvement (Okeke, 2021).

Improving the quality of teachers in Rivers State public senior secondary schools requires addressing multiple human resource needs: recruiting qualified and specialist teachers, investing in continuous professional development, enhancing working conditions, providing adequate instructional resources, and strengthening instructional supervision. When these needs are met, the quality of teaching improves, thereby promoting higher levels of student engagement and academic performance.

METHODOLOGY

Research Design

The study employed a descriptive and correlational design, strategically chosen to unravel the significant connections between Human Resource Needs and Effective Students' Academic Performance. This design provides a systematic framework for exploring how staffing levels, qualifications, and other human resource factors impact students' academic outcomes within the educational landscape of Rivers State.

Population of the Study

The population under scrutiny consists of the entire teaching faculty in public senior secondary schools across Rivers State. A detailed enumeration from the Rivers State Senior Secondary School Board (2022) indicated a substantial population of 6,893 teachers distributed across 302 schools spanning the 23 local government areas.

Sample and Sampling Technique

To ensure a representative sample, 10.6% of the total population, translating to 712 teachers comprised the sample size. The simple random sampling technique was meticulously employed. This approach not only guaranteed fair representation to also eliminate biases, and ensure that teachers from diverse schools and local government areas were inclusively considered.

Instrument for Data Collection

The principal instrument for gathering data is the "Human Resource Needs and Academic Performance Questionnaire (HRNAPQ)." This self-structured questionnaire comprised three sections to holistically capture the nuances of the study. Section 'A' focuses on collecting respondents' demographic information, while Sections 'B' and 'C' delved into the significant aspects of human resource needs and academic performance, respectively. The study used a 4-point modified Likert scale pattern, to allow participants to express their perspectives on a spectrum ranging from very high extent to very low extent.

Validity of the Instrument

The instrument of this study was given face and content validation by the supervisor and two other experts in measurement and evaluation, Department of Educational Psychology Guidance and Counselling, Ignatius Ajuru University of Education, Rumuolumeni, Port Harcourt, Rivers State to assist in evaluating the instrument. Their corrections, suggestions and inputs were incorporated into the final copies of the instrument. This is done to ensure the critical and more professional appraisal of what the instrument is expected to measure.

Reliability of the Instrument

The reliability of the instrument was established for the entire instrument. To determine the reliability of the instrument, Cronbach Alpha method was adopted, by this method copies of the instrument were administered to 20 respondents who are not be part of the sample study but are part of the study population was tested using the above-mentioned method to reveal the reliability index of .780 for the study.

Method of Data Collection

The Human Resource Needs and Academic Performance Questionnaire (HRNAPQ)." was administered with the help of two (2) trained research assistants in administering the instrument to the respondents. The completed copies of the questionnaire were collected from the respondents immediately to improve high retrieval rate. Out of the 731 copies of the instruments distributed, only 712 copies of the questionnaires which is about 97% retrieval rate was considered manageable for the data analysis of the study.

Method of Data Analysis

In analyzing the data for the study, both descriptive and inferential statistics were employed. Descriptive statistic (mean and standard deviation) was used to answer the research questions while both linear regression statistic was used to test the hypotheses at a 0.05 level of significance. With the aid of SPSS version 25 package of a computer.

RESULTS

Respondents' Demographic Information

The data from the analysis of the demographic information revealed that there were 712 respondents analyzed. Among them, 389 respondents are male, constituting 54.6% of the surveyed population, while 323 respondents are female, making up the remaining 45.4%. This data underscores a gender distribution where males are the majority in the surveyed group.

When examining age groups, 163 respondents fall within the 18-29 years category, representing 22.9%, 209 respondents are in the 30-39 years category, constituting 29.4%, and 215 respondents belong to the 50 and above category, making up 30.2%. The 40-49 years category includes 125 respondents, accounting for 17.6%. This reveals a significant proportion of respondents falling within the 30-39 years age range.

The academic qualifications of the respondents are segmented into various categories. Among them, 185 respondents have a Bed, making up 26.0%, 284 respondents hold an Med, constituting 39.9%, and 239 respondents possess a PhD, representing 33.6%. This data provides insights into the distribution of academic qualifications, with a substantial percentage holding Med degrees.

Regarding teachers' experience, 184 respondents have 1-9 years of experience, comprising 25.8%, 279 respondents have 10-19 years, making up 39.2%, and 249 respondents have 20 years and above, accounting for 35.0%. The distribution across these experience categories indicates a relatively even spread of professional experience among the respondents. This reveals a significant proportion of respondents' years of experience falling within the 10-19 years range.

Answer to the Research Questions

Research Question 1: How does the human resource need of adequacy of teachers enhance student academic performance in public senior secondary schools in Rivers State?

Table 1: Research question responses on how human resource need of adequacy of teacher enhance students' academic performance

S/N	Items	Mean	SD.	Remark
1.	The favorable teacher-to-student ratio encourages effective interaction,	2.5014	1.1125	Agree

2.	facilitating better understanding and support The distribution of teachers across subjects is designed to ensure a comprehensive and well-rounded education	2.4986	1.1175	Agree
3.	Adequate facilities and classrooms are instrumental in accommodating all students, contributing to a positive learning atmosphere	2.5365	1.1394	Agree
4.	Teachers are strategically placed to address individual student needs, promoting personalized learning experiences	2.4719	1.1234	Agree
5.	The school's administration of available resources is judiciously managed to meet the need of attainment of conducive learning environment for students' academic performance	2.5281	1.0761	Agree
Grand Mean		2.5321	1.1142	Agree

The Table 1 presents the mean and standard deviation of respondents' perceptions regarding how the human resource need of adequacy of teachers enhances students' academic performance in public senior secondary schools in Rivers State. While items 2 and 4 exhibit mean values of 2.4989 and 2.4719, respectively, falling slightly below the 2.5 criterion mean. Despite these specific items not surpassing the 2.5 mean benchmark. The grand mean of 2.5321 and respective 1.1142 standard deviation reflects an overall agreement that the human resource need of adequacy of teachers positively influences students' academic performance in public senior secondary schools in Rivers State.

Research Question 2: How does the human resource need of quality of teachers enhance students' academic performance in public senior secondary schools in Rivers State?

Table 2: Research question responses on how human resource need of quality of teachers enhance students' academic performance

S/N	Items	Mean	SD.	Remark
6.	Students may not be regular at school when felt being neglected by parents.	2.6194	1.12374	Agree
7.	Students decide to stay at home when parents do not show interest in their education.	2.5660	1.14669	Agree
8.	Students play truant when always involved in domestic activities during school hours.	2.6433	1.13342	Agree
9.	Parents rarely encourage their children to learn at home.	2.6320	1.11982	Agree
10.	Quarrelling between the father and mother at home can cause a student to be truant.	2.5829	1.12453	Agree
Grand Mean		2.8634	1.13432	Agree

The Table 2 presents the mean and standard deviation of respondents' perceptions concerning how the human resource need of quality of teachers enhances students' academic performance in public senior secondary schools in Rivers State. Notably, all items exhibit mean values above the 2.5 criterion, indicating a consistent agreement among respondents. With a grand mean of 2.8634 and a standard deviation of 1.13432, the respondents overwhelmingly agree that the human resource need of quality of teachers significantly enhances students' academic performance in public senior secondary schools in Rivers State. The results suggest a strong consensus among respondents on the positive influence of teacher quality on students' academic outcomes.

Test of Hypotheses

Hypothesis One: There is no significant relationship between the human resource need of adequacy of teachers' and students' academic performance in public senior secondary schools in Rivers State.

Table 3: Summary of regression analysis on the relationship between human resource need of adequacy of teachers' and students' academic performance

Part A: Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.571 ^a	.950	.830	1.11450		
a. Predictors: (Constant), Adequacy of teachers						
Part B: ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.389	1	22.389	18.250	.000 ^b
	Residual	881.890	710	1.242		
	Total	904.279	711			
a. Dependent Variable: Students' academic performance						
b. Predictors: (Constant), Adequacy of teachers						
Part C: Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.870	.890		20.947	.000
	Adequacy of teachers	.570	.370	.571	4.246	.000
a. Dependent Variable: Students' academic performance						

The data presented in Table 3 sheds light on the coefficient of the relationship between the human resource need of the adequacy of teachers and students' academic performance in public senior secondary schools in Rivers State. In Part A of the analysis, focusing on the relationship, the regression model reveals an R-squared value of 0.950, signifying that approximately 95% of the variability in students' academic performance can be elucidated by the human resource need of the adequacy of teachers. Proceeding to Part B, the ANOVA results underscore the statistical significance of the regression model (F1, 710 = 18.25, p < 0.05), indicating a substantial relationship between the human resource need of the adequacy of teachers and students' academic performance. The degree of freedom for the regression and residuals is 1 and 710, respectively. The Part C, investigate the coefficients, the intercept (Constant) is 1.870, and the coefficient for the human resource need of the adequacy of teachers is 0.570. This implies that for every unit increase in the adequacy of teachers, there is a predicted increase of 0.57 units in students' academic performance. Both coefficients demonstrate statistical significance with t-values of 20.947 (Constant) and 4.246 (Adequacy of teachers), both at p < 0.05. Based on this analysis, the null hypothesis (Ho1), is decisively rejected at the 0.05 alpha level. The positive regression equation ($y = 1.870 + 0.570x$) signifies that an improvement in the adequacy of teachers is associated with an enhancement in students' academic performance, emphasizing the pivotal role of teacher adequacy in shaping academic outcomes.

Hypothesis Two: There is no significant relationship between the human resource need of the quality of teachers’ and students’ academic performance in public senior secondary schools in Rivers State.

Table 4: Summary of regression analysis on the relationship between human resource need of quality of teachers’ and students’ academic performance

Part A: Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.870 ^a	.790	.710	1.10181		
a. Predictors: (Constant), Quality of teachers						
Part B: ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.537	1	6.537	5.384	.021 ^b
	Residual	861.935	710	1.214		
	Total	868.472	711			
a. Dependent Variable: Student academic performance						
b. Predictors: (Constant), Quality of teachers						
Part C: Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.576	.17		24.181	.000
	Quality of teachers	.850	.36	.870	2.320	.000
a. Dependent Variable: Student academic performance						

The data in Table 4 provides insights into the coefficient of the relationship between the human resource need of the quality of teachers and students’ academic performance in public senior secondary schools in Rivers State. In Part A, examining the relationship, the regression model indicates an R-squared value of 0.79, signifying that approximately 79% of the variability in students’ academic performance can be explained by the human resource need of the quality of teachers. Moving to Part B, the ANOVA results underscore the statistical significance of the regression model (F1, 710 = 5.38, p < 0.05), highlighting a significant relationship between the human resource need of the quality of teachers and students’ academic performance. The degree of freedom for the regression and residuals is 1 and 710, respectively. The Part C, delving into the coefficients, the intercept (Constant) is 2.576, and the coefficient for the human resource need of the quality of teachers is 0.850. This suggests that for every unit increase in the quality of teachers, there is a predicted increase of 0.85 units in students’ academic performance. Both coefficients demonstrate statistical significance with t-values of 24.181 (Constant) and 2.320 (Quality of teachers), both at p < 0.05. Consequently, the null hypothesis (Ho2), is decisively rejected at the 0.05 alpha level. The positive regression equation ($y = 2.576 + 0.850x$) signifies that an improvement in the quality of teachers is associated with an enhancement in students’ academic performance, underscoring the pivotal role of teacher quality in shaping academic outcomes.

DISCUSSION OF FINDINGS

Human Resource Need of Adequacy of Teachers' and Students' Academic Performance

The investigation into the Human Resource Need of Adequacy of Teachers and its impact on students' academic performance revealed a significant relationship ($F_{1, 710} = 18.25, p < .05$), contrary to the null hypothesis. This finding aligns with the works of Adebayo (2020) who emphasized that positive teacher and the adequacy of teachers plays crucial roles in students' academic performance. The presence of adequate teachers may mitigate negative influences, fostering a positive academic environment. A positive correlation between teacher adequacy and students' academic performance resonates with Agabi's (2019) insights on positive peer pressure. Just as positive peer pressure can motivate individuals to excel, the adequacy of teachers may serve as a positive influence, challenging students to achieve their best academically. This aligns with the notion that a supportive educational environment, facilitated by adequate teachers, can contribute to improved academic outcomes. Moreover, the rejection of the null hypothesis underscores the importance of considering teacher adequacy in educational policies and planning. The findings emphasize that investing in ensuring an adequate number of qualified teachers is crucial for enhancing students' academic performance in public senior secondary schools in Rivers State. This discussion contributes to the broader discourse on the pivotal role of teachers in shaping the educational landscape and fostering positive academic outcomes.

Human Resource Need of Quality of Teachers' and Students' Academic Performance

The examination of the Human Resource Need of Quality of Teachers and its influence on students' academic performance revealed a statistically significant relationship ($F_{1, 710} = 5.38, p < .05$), contradicting the null hypothesis. This outcome is consistent with prior research, such as the insights from Ololube (2017), who highlighted the pivotal role of high-quality teachers in shaping students' academic performance positively. The positive correlation between the quality of teachers and students' academic performance aligns with Nwosu (2020) observations on positive peer pressure. Much like positive peer influence motivates individuals to excel, the quality of teachers can serve as a positive force, inspiring students to attain their best academic achievements. This resonates with the concept that a supportive educational environment, characterized by high-quality teachers, contributes to enhanced academic outcomes. The rejection of the null hypothesis underscores the significance of prioritizing teacher quality in educational policies and planning. The findings emphasize that investing in ensuring a high standard of teacher qualifications is essential for improving students' academic performance in public senior secondary schools in Rivers State. This discussion adds to the broader discourse on the pivotal role of teachers in shaping the educational landscape and fostering positive academic outcomes.

CONCLUSION

The study on human resource needs and effective students' academic performance in public senior secondary schools in Rivers State has yielded significant insights. The research indicates a substantial correlation between specific human resource elements and students' academic achievements. Consequently, it is imperative for educational administrators, particularly in public senior secondary schools, to strategically address these human resource needs. Collaborative efforts are essential to implement tailored interventions that enhance the teaching

and learning environment, ultimately contributing to improved academic outcomes. The identification of key factors influencing academic performance emphasizes the need for targeted measures, considering elements such as teacher quality, adequate staffing, and professional development. This conclusion highlights the importance of aligning human resource strategies with educational objectives to ensure the overall success of students in public senior secondary schools in Rivers State.

Recommendations

Based on the comprehensive findings and conclusions drawn from the study, the following recommendations are proposed:

- The Ministry of Education should devise and implement targeted recruitment strategies aimed at attracting highly qualified teachers, thereby elevating the status of the teaching profession and making it more appealing.
- Curriculum developers are urged to engage in regular reviews and updates to ensure the curriculum remains aligned with the dynamic educational needs of students.

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