

Health insurance and job performance of secondary school teachers in Cross River State

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ABSTRACT

This study highlights how health insurance predicts the job performance of secondary school teachers in Cross River State, Nigeria. Using a descriptive survey design, data were collected from 190 public secondary school teachers and 72 principals, vice-principals across the three senatorial districts. Instruments employed were structured questionnaires on a four-point Likert scale. Simple linear regression analysis revealed a weak but statistically significant positive prediction ($R = .148$, $R^2 = .022$, $p = .046$). This means health insurance explained only 2.2% of the variance in teachers' job performance. Basic descriptive statistics (means, standard deviations) showed that while teachers maintained moderate performance levels, access to functional health insurance remained limited. This suggests that while health insurance matters, it is not the primary determinant of teachers' job performance. Findings suggest that a well-structured and accessible insurance scheme tailored to educators could enhance productivity. Recommendations include strengthening the National Health Insurance Authority (NHIA) and Ayadecare schemes, improving awareness, and expanding coverage.

Keywords: Health insurance, job performance, secondary school teachers, fringe benefits, Cross River State, teacher welfare, educational management, expectancy theory.

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INTRODUCTION

Context and background

Teachers are the backbone of any educational system, and their job performance directly determines student achievement, school effectiveness, and, ultimately, national development. In Nigeria, however, secondary school teachers often contend with delayed salaries, inadequate infrastructure, heavy workloads, and weak welfare support. These conditions negatively affect motivation and effectiveness. Among welfare provisions, health insurance may be vital because it reduces financial stress, encourages preventive care, and sustains productivity.

Despite the recognized importance of health insurance for sustaining teacher productivity, coverage in Nigeria remains low. The National Health Insurance Authority (NHIA, 2022) reports that fewer than 10% of Nigerians are enrolled in health insurance schemes, leaving the majority

of teachers without adequate coverage. In Cross River State, for instance, despite the introduction of the Ayadecare initiative, participation among teachers has remained minimal. This gap underscores the urgent need to strengthen welfare provisions, particularly health insurance, to enhance teacher job performance and, by extension, improve educational outcomes.

Existing policies and gaps

The National Health Insurance Authority (NHIA) was established to ensure universal health coverage. Complementary state-level schemes, such as Ayadecare in Cross River, aim to extend affordable healthcare. Yet, challenges such as low awareness, poor hospital coverage, and bureaucratic inefficiencies limit scheme effectiveness (Pariya and Nasiru, 2021; Usuh and

Abdullahi, 2022). Consequently, many teachers continue to finance healthcare out of pocket, affecting their income, health, and classroom performance.

LITERATURE REVIEW

Health insurance has been conceptualized in different ways by scholars. AlJohani and Bugis (2024) define it as a method of dividing the financial risk brought on by variation in each person's health-care costs by pooling costs over time through pre-payment and across people through risk-sharing. This definition highlights health insurance as a financial buffer that protects beneficiaries from unexpected health-related expenses. Similarly, the Center for Medicare and Medicaid Services (CMS, 2023) describes a health insurance plan as a package of covered health care items and services that sets how much it will pay for those items and services. This explanation emphasizes that a health insurance scheme is systematically organized to ensure that beneficiaries receive specified services at predictable costs.

Teacher job performance is also widely examined in the literature and is shaped by multiple interrelated factors essential to achieving the educational goals of schools. Liang et al. (2024) defines it as the degree to which teachers accomplish assigned teaching duties (task performance) and contribute to the school through contextual behaviours, such as collaboration and involvement in school initiatives. This perspective underscores instructional effectiveness, classroom management, assessment, attendance, and teamwork as critical indicators. Similarly, Berhanu (2025) explains teacher job performance as the total expected value to the educational institution of the teacher's discrete behaviours over a period, including tasks such as lesson delivery, classroom management, and fostering student learning outcomes. Together, these definitions stress that a teacher's job performance is the result of effectively executing professional roles and responsibilities.

Research on health insurance and job performance of teachers shows mixed results. In Nigeria, studies report positive effects of health insurance on productivity, absenteeism reduction, and organizational commitment (Usoh and Abdullahi, 2022; Owolabi et al., 2016). However, studies from Kenya and Uganda found only weak or inconsistent associations, largely due to scheme inefficiencies (Mwandihhi et al., 2013; Namakula and Wanyenze, 2018).

Globally, research also reflects variation. In Brazil, health coverage significantly enhanced labour productivity (Dizioli and Pinheiro, 2016). In India, Reddy and Sekher (2020) noted that insurance coverage improved teacher well-being but had only marginal effects on classroom performance. Similarly, a South African study reported that the impact of health insurance on performance was

moderated by salary and workload factors (Moyo, 2021). These studies suggest that context matters: scheme implementation quality, scope of coverage, and complementary welfare policies shape outcomes. Despite this growing body of work, very few studies focus specifically on Nigerian teachers, particularly in Cross River State. This creates a gap that the present study seeks to fill.

Rationale, objectives and hypotheses

This study investigates whether health insurance predicts teacher job performance in Cross River State. By focusing on a population where coverage exists but remains underutilized, the study provides evidence relevant for education and health policy. The objectives are:

1. To examine the predictive relationship between health insurance and teachers' job performance.
2. To generate evidence for policymakers on the importance of teacher welfare in education reform.

The hypotheses tested were:

H_0 : Health insurance does not significantly predict the job performance of secondary school teachers in Cross River State.

H_1 : Health insurance significantly predicts the job performance of secondary school teachers in Cross River State.

Theoretical framework

This study adopts Vroom's Expectancy Theory (1964). The theory explains motivation as the product of expectancy (effort leads to performance), instrumentality (performance leads to outcomes), and valence (the value of outcomes). Teachers expect that health insurance reduces health risks and absenteeism. They perceive health coverage as organizational support, reinforcing commitment. They value health security, which enhances motivation to perform teaching duties. Thus, health insurance can positively influence teacher job performance through improved motivation and reduced health-related disruptions.

METHODS

This study employed a descriptive survey design to examine the relationship between health insurance and job performance of secondary school teachers in Cross River State, Nigeria. The population comprised 4,195 teachers, 297 principals, and 297 vice principals across

297 public secondary schools (State Education Board [SEB], 2023). Through multistage and proportionate random sampling, 190 teachers were selected, while 72 principals and vice principals rated teachers' job performance to provide independent assessments. Two instruments were used for data collection: the Health Insurance Questionnaire (HIQ) and the Teachers' Job Performance Questionnaire (TJPQ). Both were developed by the researchers based on existing frameworks in the literature and adapted to the Nigerian secondary school context.

The HIQ, which contained 20 items, measured teachers' access to and utilization of health insurance benefits. For example, items asked teachers whether they had enrolled with the National Health Insurance Authority (NHIA), whether the enrollment requirements were easy to meet, and whether they had benefited from NHIA participation. The TJPQ consisted of 30 items and assessed six dimensions of job performance: lesson preparation, classroom management, punctuality, value inculcation, participation in extracurricular activities, and student evaluation. Sample items reflected statements such as whether a teacher prepared lesson notes, used instructional materials effectively, carried out effective teaching, and demonstrated mastery of subject matter. All items in both instruments were rated on a 4-point Likert scale ranging from 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree. Face validity was established through expert review by specialists in educational management and planning, ensuring that the items adequately represented the constructs under study. A pilot

test reliability analysis yielded Cronbach's alpha coefficients of 0.81 (HIQ) and 0.87 (TJPQ), indicating good internal consistency.

Approval for the study was obtained from the Cross River State Ministry of Education and the management of participating schools. Informed consent was obtained from all participants, and confidentiality of responses was assured. Participation was voluntary, and no exclusion criteria were applied apart from active employment in public secondary schools at the time of the study. Ethical considerations followed national guidelines for educational research and international standards. Data were analyzed using SPSS v.25. Descriptive statistics (mean, standard deviation, frequency counts) summarized responses, while simple linear regression was employed to determine the predictive influence of health insurance on teacher job performance at the 0.05 significance level.

RESULTS

The result shows the value of the regression coefficient (R) and its corresponding R² of .148 and .022, respectively (Table 1). The R-value of .148 shows that there is a positive prediction of job performance of secondary school teachers based on health insurance in Cross River State. The value of R² of .022 indicates that 2.2% of teachers' job performance is predicted by health insurance in secondary schools in Cross River State, which indicates a weak prediction.

Table 1. Summary of regression analysis for the prediction of job performance of teachers based on health insurance.

Model		Unstandardized coefficients		Standardized coefficients	R	R ²
		B	Std. Error	Beta		
1	(Constant)	64.935	1.813		.148	.022
	Health Insurance	.093	.046	.148		

The result of the analysis gives a summary of the regression analysis. The result shows that the calculated f-value is 4.049 (Table 2). The probability of F, which is the P-value, is .046. Since the P-value is less than the alpha level of .05 ($p < .05_{.046}$), the result is statistically significant.

Thus, the null hypothesis is rejected. Hence, there is a weak significant prediction of job performance of secondary school teachers in Cross River State based on health insurance.

Table 2. Summary of regression analysis for the significant prediction of job performance of teachers based on health insurance.

Model	Sum of squares	Df	Mean square	F	P-value
Re gression	388.791	1	388.791	4.049	.046*
Residual	17381.996	181	96.033		
Total	17770.787	182			

* Significant at $p < .05_{.046}$

DISCUSSION

The findings confirm that health insurance significantly predicts teacher job performance, but the effect size ($R^2 = .022$) is extremely small. This suggests that while health insurance matters, it is not the primary determinant of teachers' job performance. Other factors such as salary, workload, infrastructure, and career progression opportunities may play stronger roles. The result indicates a weak prediction of secondary school teachers' job performance based on health insurance. In other words, when the value of one variable increases, the value of the other also increases, but the prediction is not strong.

Furthermore, even in the absence of health insurance, teachers still put in effort. Although the predictive strength is weak, the significance of the relationship is important. This outcome may be attributed to the fact that when teachers are provided with a health insurance scheme, they are motivated to deliver quality service. However, despite the existence of health insurance schemes and some teachers being registered, the services provided are often inadequate. Nonetheless, teachers continue to demonstrate commitment to their work. Health insurance remains crucial because it helps avoid out-of-pocket expenditures, allowing teachers to focus on their work without financial stress. It also provides access to preventive care, medical check-ups, and treatment. As a result, health insurance enables teachers to attend work regularly, minimizes absenteeism, and allows them to perform their duties more effectively without health-related distractions. This finding implies that if the government implements a functional and effective health insurance scheme, teachers may deliver higher-quality services, even though current provisions are inadequate.

The present result supports the findings of Usoh and Abdullahi (2022), who examined the effect of the National Health Insurance Scheme on employees' performance in the Federal Ministry of Works and Housing. Their study revealed a significant relationship between health insurance and employee performance. In a broader context, the weak predictive power found in this study aligns with findings from Kenya (Namakula and Wanyenze, 2018), where limited scheme effectiveness reduced impact. By contrast, countries with better-structured schemes, such as Brazil and South Africa, reported stronger associations (Dizioli and Pinheiro, 2016; Moyo, 2021). This highlights the importance of implementation quality, accessibility, and trust in service delivery. Overall, the findings have policy relevance: they confirm that teacher health security is linked, even modestly, to job performance. This underscores the need for targeted welfare reforms in Nigeria's education sector.

Conclusion

The findings of this study reveal that health insurance has

a statistically significant but weak relationship with the job performance of secondary school teachers in Cross River State. Although the predictive power ($R^2 = .022$) is small, the result highlights that access to functional health coverage plays a role, however limited, in influencing teacher job performance. This suggests that while health insurance alone may not be a strong determinant of teacher job performance, it constitutes an important component of the broader welfare framework that supports teacher motivation, well-being, and productivity.

The weak effect underscores the need for policymakers to view health insurance not in isolation but as part of a more comprehensive package of welfare policies. Improving the accessibility, efficiency, and coverage of schemes such as the National Health Insurance Authority (NHIA) could help reduce absenteeism, enhance classroom engagement, and foster a healthier teaching workforce. Importantly, health insurance provides teachers with security against unforeseen medical costs, thereby allowing them to focus more effectively on their professional duties.

While this study was limited in scope to Cross River State, its implications resonate more broadly for Nigeria and similar developing contexts where teacher welfare policies are underdeveloped. Strengthening health insurance for teachers could yield cumulative benefits for educational quality. In summary, although health insurance demonstrates only a modest effect on job performance, it remains a crucial policy lever. Prioritizing teacher health coverage can serve as an entry point for wider welfare reforms that ultimately enhance both teacher satisfaction and student learning outcomes.

RECOMMENDATIONS

1. Functional Health Scheme for Teachers: Cross River State Government should establish a dedicated, effective health insurance scheme tailored to teachers.
2. Strengthen NHIA Accessibility: Federal authorities must expand NHIA service reach, ensuring urban and rural teacher inclusion.
3. Monitoring and Evaluation: Continuous oversight should track provider performance and ensure accountability.
4. Awareness and Support Campaigns: Targeted sensitization efforts should encourage teacher enrollment and effective scheme utilization.

Limitations and future research

Several limitations of this study should be acknowledged. First, the use of a cross-sectional survey design restricts the ability to establish causal relationships between health insurance and teacher job performance. The associations observed indicate correlation but do not allow for conclusions about temporal or causal directions. Second,

the reliance on self-reported measures of health insurance access and perceived benefits may have introduced social desirability or recall bias, despite efforts to assure confidentiality and anonymity. While principals and vice principals provided independent ratings of teachers' job performance, subjective judgments could still have influenced the results. Another limitation lies in the narrow focus on health insurance as a single welfare predictor. Although the study found a statistically significant relationship, the variance explained was very small, suggesting that teacher job performance is shaped by multiple interrelated factors. Excluding these variables may have limited the explanatory power of the model.

Future research should address these limitations by incorporating multiple predictors of teacher job performance into more comprehensive models. For example, including demographic and contextual factors such as gender, teaching experience, and school location alongside welfare indicators would allow for a richer understanding of the determinants of teacher job performance. Employing multiple regression techniques would make it possible to test whether health insurance remains a significant contributor when controlling for these additional variables. Furthermore, comparative analyses between groups, for example, teachers with and without health insurance, or those working in rural versus urban schools, would shed light on differential patterns of welfare access and performance outcomes. Longitudinal designs are strongly recommended, as they would allow for monitoring the impact of welfare policies on teacher performance over time and capturing dynamic changes. Finally, cross-national or state-level comparative studies could provide insights into how different welfare structures and education policies influence teacher productivity, thereby guiding more evidence-based reforms in Nigeria and beyond.

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