



JOINT PREDICTION OF MANPOWER DEVELOPMENT DIMENSIONS ON TEACHERS' JOB PERFORMANCE IN PUBLIC SECONDARY SCHOOLS IN ANAMBRA STATE, NIGERIA

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ABSTRACT

Teachers' job performance is central to the effective attainment of educational goals, yet concerns persist regarding the quality and effectiveness of teachers' performance in public secondary schools in Nigeria. This study examined the predictive relationship between manpower development and teachers' job performance in public secondary schools in Anambra State, with particular attention to in-service training, mentorship, research collaboration and conference participation. A correlational research design was adopted. The population comprised 5,949 teachers in 268 public secondary schools in Anambra State, from which a sample of 1,187 teachers was selected using proportionate simple random sampling across the six education zones. Data were collected using the Manpower Development Questionnaire (MDQ), Delegation of Authority Questionnaire (DAQ), and Teachers' Job Performance Questionnaire (TJPQ). The instruments were validated by three experts, while reliability coefficients of 0.81, 0.79 and 0.85 were obtained respectively. Multiple regression analysis was used to analyse the data at the 0.05 significance level. The reported regression model produced a moderate multiple correlation of $(R=.48)$ and explained 23% of the variance in teachers' job performance $(R^2=.23)$. The overall regression model was statistically significant, $(F(4,970) = 72.56, p < .05)$. In-service training made the strongest relative contribution $(\beta=.37)$, followed by conference participation $(\beta=.27)$, research collaboration $(\beta=.14)$, and mentorship $(\beta=.08)$; all four predictors made statistically significant positive contributions. The findings indicate that systematic professional development constitutes an important organisational factor associated with teachers' job performance. The study recommends sustained investment in relevant in-service training, professional conferences, collaborative research and structured mentorship. However, the supplied regression output contains only the four manpower-development variables and



therefore does not provide statistical evidence for the combined eight-variable model of manpower development and authority delegation.

Keywords: manpower development, authority delegation, teachers' job performance, in-service training, mentorship, research collaboration, conference participation, public secondary schools

Introduction

Teachers constitute one of the most important human resources in the education system because the achievement of educational objectives depends substantially on the quality of their professional activities. Teachers are expected to plan and deliver instruction, manage classrooms, assess learners, participate in school activities and perform other responsibilities necessary for the effective functioning of schools. Teachers' job performance therefore represents the extent to which teachers effectively and efficiently execute their assigned duties in pursuit of predetermined educational goals.

Njoku (2024) described teachers' job performance as measurable actions or duties performed by teachers with the primary aim of achieving school goals. The concept emphasises observable professional activities and their contribution to institutional objectives. Effective teachers' job performance is consequently reflected in such areas as lesson preparation and delivery, classroom management, assessment of learners, attendance, participation in school programmes and the effective discharge of assigned administrative responsibilities.

Despite the importance of teachers' job performance, concerns have continued to arise regarding the extent to which teachers in Nigerian secondary schools perform their responsibilities at expected standards. Nwokolo (2016), for example, reported concerns arising from supervisory observations of teachers' performance in secondary schools. Stakeholders have introduced different measures to improve teacher performance, including recognition and rewards for outstanding teachers, professional development programmes, improved remuneration and other motivational interventions. Nevertheless, concerns about teachers' performance continue to generate scholarly and administrative attention. This suggests that teacher performance may be influenced by a combination of individual, professional and organisational factors.

One factor that may influence teachers' job performance is manpower development. Cole (2022) conceptualised manpower development as learning activities directed towards employees' future needs and career development. Pareek (2022) similarly viewed manpower development as an organisational process involving investment in employees through education, training, coaching, mentoring and related developmental activities. In the school system, manpower development enables teachers to update their knowledge and skills, respond to emerging educational demands and improve their professional competencies.

The importance of manpower development is particularly evident in contemporary education, where teachers are expected to respond to curriculum reforms, technological developments, changing learner characteristics, new approaches to assessment and evolving professional



standards. Peretomode and Chukwuma (2022) emphasised the importance of manpower development in improving the capacity and productivity of personnel in educational institutions. Through systematic professional development, teachers may acquire knowledge and competencies that can enhance their classroom practices and other professional responsibilities.

Four dimensions of manpower development considered in the present study are in-service training, mentorship, research collaboration and conference participation. In-service training provides opportunities for teachers to update professional knowledge and acquire new skills. Mentorship enables less-experienced teachers to receive guidance and professional support from more experienced colleagues. Research collaboration encourages knowledge generation, professional inquiry and evidence-based practice, while conference participation exposes teachers to emerging ideas, research findings and professional experiences.

Authority delegation constitutes another organisational factor potentially relevant to teachers' job performance. Delegation involves assigning specified duties and responsibilities to subordinates while retaining overall organisational accountability. In educational administration, effective delegation may provide teachers with opportunities to participate in decision-making, exercise professional responsibility and develop leadership competencies. Appropriate delegation can also reduce excessive concentration of responsibilities at the administrative level and facilitate more efficient school operations.

The relevance of authority delegation to teacher performance is based on the possibility that teachers who are entrusted with appropriate responsibilities may develop stronger ownership of school activities and greater opportunities to apply their professional competencies. Delegated responsibilities may include supervisory, leadership, financial and academic duties. However, effective delegation depends on appropriate matching of responsibilities with teachers' competence, adequate guidance and sufficient organisational support.

Public secondary schools in Anambra State operate within a context in which teachers may encounter various organisational and resource-related challenges. These include inadequate infrastructure, overcrowded classrooms, limited office space and insufficient access to electricity, water, internet facilities, computers, library resources, laboratory equipment and other instructional facilities. Poorly maintained buildings, inadequate furniture, leaking roofs and poor ventilation may further constrain teaching and learning. Such conditions may make it difficult for teachers to deliver instruction effectively, implement innovative pedagogical approaches, integrate technology and perform assessment and administrative responsibilities efficiently.

Concerns have also been raised regarding the standard of teachers' job performance in secondary schools in the state. Eyre and Pettinger (2025) identified management-related challenges that may affect organisational effectiveness, while reports from school-level observations suggest that some teachers may continue to rely on established practices without sufficient adaptation to emerging educational demands. These concerns reinforce the need to examine organisational factors that may contribute to teachers' performance.



Although previous studies have examined staff development, training, mentorship and other administrative practices in relation to employee or teacher performance, the combined contribution of manpower development and authority delegation requires further examination within the context of public secondary schools in Anambra State. It is against this background that the present study examined the predictive relationship between manpower development and teachers' job performance, with the broader study also incorporating authority delegation as an organisational predictor.

Purpose of the Study

The study examined the predictive values of manpower development and authority delegation on teachers' job performance in public secondary schools in Anambra State, Nigeria. Specifically, the study sought to determine the joint predictive value of the dimensions of manpower development on teachers' job performance in public secondary schools in Anambra State.

Research Question

The study was guided by the following research question:

What is the joint predictive value of manpower development dimensions on teachers' job performance in public secondary schools in Anambra State?

Hypothesis

The following null hypothesis was tested at the 0.05 level of significance:

H₀: There is no significant joint prediction of manpower development dimensions on teachers' job performance in public secondary schools in Anambra State.

Method

Research Design

The study adopted a correlational research design. Correlational research design is appropriate where the researcher seeks to determine the nature and magnitude of relationships or predictive associations among variables without manipulating them. The design was considered appropriate because the study examined the extent to which naturally occurring manpower-development practices predicted teachers' job performance.

Area of the Study

The study was conducted in Anambra State, Nigeria. Anambra State is located in the South-East geopolitical zone of Nigeria, and its capital is Awka. The state has a substantial public secondary school system administered through six education zones.

Population of the Study

The population comprised 5,949 teachers in 268 public secondary schools in Anambra State. The population figure was obtained from records of the Post Primary Schools Service Commission (PPSSC), Awka, in February 2026.



Sample and Sampling Technique

A sample of 1,187 teachers was selected from the population of 5,949 teachers, representing approximately 20% of the population. Proportionate simple random sampling was used to select teachers from the six education zones. This procedure ensured representation of teachers across the education zones in proportion to their respective population sizes.

Instruments for Data Collection

Three instruments were used for data collection. The first was the Manpower Development Questionnaire (MDQ), which measured the manpower-development dimensions investigated in the study. These dimensions comprised in-service training, mentorship, research collaboration and conference participation. The second instrument was the Delegation of Authority Questionnaire (DAQ), which measured authority-delegation practices. The DAQ contained 20 items. The third instrument was the Teachers' Job Performance Questionnaire (TJPQ), consisting of 22 items designed to measure teachers' job performance.

Validity of the Instruments

The instruments were subjected to face and content validation by three experts from the Faculty of Education, Nnamdi Azikiwe University, Awka. The experts examined the instruments for clarity, relevance, adequacy of coverage and suitability of the items for measuring the variables of the study. Their observations were incorporated into the final versions of the instruments.

Reliability of the Instruments

The reliability of the instruments was established through a test-retest procedure. The instruments were administered to 26 teachers comprising 15 male and 11 female teachers selected from public secondary schools in Enugu State. The data obtained from the administrations were subjected to reliability analysis. The resulting coefficients were 0.81 for the MDQ, 0.79 for the DAQ and 0.85 for the TJPQ. These coefficients indicate satisfactory reliability for the instruments.

Data Collection Procedure

The questionnaires were administered personally by the researcher with the assistance of five trained research assistants. Of the 1,189 copies distributed, 1,187 were properly completed and retrieved for analysis, representing a very high retrieval rate.

Data Analysis

The data were analysed using multiple regression analysis. The coefficient of determination (R^2) was used to determine the proportion of variance in teachers' job performance explained by the predictor variables, while the F-test was used to determine whether the regression model was statistically significant. The null hypothesis was tested at the 0.05 level of significance.

Results

Research Question: What is the joint predictive value of manpower development dimensions on teachers' job performance in public secondary schools in Anambra State?



Table 1: Summary of Multiple Regression Analysis of the Joint Prediction of Manpower Development Dimensions on Teachers' Job Performance

Predictors	R	R ²	Adjusted R ²	SE
In-service training, mentorship, research collaboration and conference participation	.48	.23	.22	3.60

The results in Table 1 indicate a moderate positive multiple correlation between the four manpower-development variables and teachers' job performance ($R=.48$). The coefficient of determination ($R^2=.23$) shows that the four predictors jointly explained 23% of the variance in teachers' job performance. The adjusted (R^2) of .22 indicates that approximately 22% of the variance remained explained after adjustment for the number of predictors in the model.

Test of Hypothesis

H₀: There is no significant joint prediction of manpower development dimensions on teachers' job performance in public secondary schools in Anambra State.

Table 2: Multiple Regression Analysis of the Joint Prediction of Manpower Development Dimensions on Teachers' Job Performance

Model	Sum of Squares	df	Mean Square	F	P
Regression	3768.84	4	942.21	72.56	.000
Residual	12596.14	970	12.99		
Total	16364.97	974			

Predictor	B	SE	β	T	p	Relative position
Constant	28.95	1.19	—	24.30	.000	—
In-service training	0.62	0.26	.37	9.39	.000	1
Conference participation	0.56	0.07	.27	8.65	.000	2
Research collaboration	0.24	0.25	.14	4.92	.001	3
Mentorship	0.16	0.07	.08	2.36	.017	4

Significant at 0.05 level.

The results in Table 2 show that the overall regression model was statistically significant, ($F(4,970)=72.56, p<.05$). Since the probability value is less than the 0.05 level of significance, the null hypothesis was rejected. The result indicates that the four manpower-development dimensions jointly and significantly predicted teachers' job performance. The coefficient of determination ($R^2=.23$) indicates that the four predictor variables jointly explained 23% of the variance in teachers' job performance, while 77% was associated with other factors outside the model. In-service training made the largest relative contribution to the prediction of teachers' job performance ($\beta=.37, p<.05$). Conference participation made the second-largest contribution ($\beta=.27, p<.05$), followed by research collaboration ($\beta=.14, p<.05$) and mentorship ($\beta=.08, p<.05$). All four predictors made statistically significant positive contributions to teachers' job performance.



Discussion

The finding revealed that the manpower-development dimensions jointly and significantly predicted teachers' job performance in public secondary schools in Anambra State. The regression model yielded a moderate multiple correlation coefficient of $(R=.48)$, while the coefficient of determination showed that the four manpower-development variables jointly accounted for 23% of the variance in teachers' job performance. The statistically significant F-value further established that the combined contribution of the predictors was unlikely to have occurred by chance within the parameters of the model.

This finding suggests that opportunities for teachers to acquire new knowledge, strengthen professional competencies and interact with other professionals are associated with teachers' capacity to perform their duties effectively. Manpower development can enhance teachers' knowledge of instructional methods, curriculum requirements, assessment practices, classroom management and emerging developments in education. It may also increase teachers' opportunities to share experiences and learn from colleagues and other professionals.

The finding agrees with Ezech (2022), who reported the relevance of strategies for improving teachers' job performance in secondary schools in Dunukofia Local Government Area of Anambra State. It is also consistent with Olefeoro, Ikpe and Bassey (2015), who found significant relationships between professional and motivational practices and teachers' job performance in secondary schools in Akwa Ibom State. The result is further related to Uko, Umosen and Caleb (2025), who examined administrative practices associated with teachers' job performance in secondary schools.

In-service training emerged as the strongest relative predictor of teachers' job performance, with a standardized beta coefficient of .37. This finding suggests that, among the manpower-development dimensions included in the model, in-service training made the largest unique statistical contribution to teachers' job performance. Regular in-service training can provide teachers with opportunities to update their knowledge and acquire competencies needed to respond to changes in curriculum, pedagogy, assessment and educational technology. The finding therefore underscores the relevance of continuing professional development in the teaching profession.

Conference participation was the second strongest predictor, with a standardized beta coefficient of .27. Participation in professional conferences can expose teachers to new research findings, innovative practices and professional experiences. Conferences may also facilitate interaction among practitioners and provide opportunities for teachers to learn about emerging developments beyond their immediate school environments. The positive contribution observed in the present study therefore suggests that professional exposure beyond routine school activities may be associated with improved teacher performance.

Research collaboration also made a significant contribution to teachers' job performance. The standardized beta coefficient of .14 indicates that research collaboration had a positive unique contribution after the effects of the other manpower-development variables were controlled.



Collaborative research can promote critical inquiry, professional interaction, knowledge sharing and evidence-based problem solving. For teachers, engagement in research collaboration may encourage the examination of classroom problems and the adoption of instructional practices supported by evidence.

Mentorship recorded the smallest standardized beta coefficient ($\beta=.08$) but remained a statistically significant predictor. The result indicates that mentorship made a unique contribution to teachers' job performance even after the other manpower-development dimensions were controlled. Mentorship may provide less-experienced teachers with professional guidance, feedback, practical advice and opportunities to learn from more experienced colleagues. The relatively smaller beta coefficient should therefore be interpreted as a difference in relative statistical contribution rather than as evidence that mentorship has no relevance to teachers' performance.

The finding that the model explained 23% of the variance in teachers' job performance is also noteworthy. While this represents a statistically significant contribution, it demonstrates that manpower development alone does not account for most of the observed variation in teachers' job performance. Other factors may include leadership practices, availability of instructional resources, workload, motivation, school climate, remuneration, supervision, teachers' qualifications and experience, organisational support and infrastructure. Teachers' job performance is therefore a multidimensional phenomenon that cannot be adequately explained by professional development alone.

Conclusion

The study established that the reported manpower-development dimensions— in-service training, mentorship, research collaboration and conference participation—jointly and significantly predicted teachers' job performance in public secondary schools in Anambra State. The four variables explained 23% of the variance in teachers' job performance. In-service training made the strongest relative contribution, followed by conference participation, research collaboration and mentorship.

The findings highlight the importance of sustained professional development in strengthening teachers' capacity to perform their responsibilities. However, the proportion of unexplained variance also indicates that other organisational and individual factors contribute to teachers' job performance.

It is important to note that the regression output supplied for this article contains four manpower-development predictors only. Consequently, the reported regression results establish the joint predictive contribution of manpower development dimensions but do not statistically establish a combined eight-predictor model involving both manpower development and authority delegation.



Recommendations

Based on the findings, the following recommendations are made:

1. The Post Primary Schools Service Commission and relevant education authorities should strengthen regular in-service training programmes for teachers and ensure that such programmes address identified professional and instructional needs.
2. Professional conference participation should be supported through institutional sponsorship, registration assistance and opportunities for teachers to participate in relevant educational conferences, workshops and seminars.
3. Structured mentorship programmes should be established in public secondary schools, particularly to support newly employed and less-experienced teachers through systematic professional guidance.
4. Teachers should be encouraged to participate in collaborative research activities involving colleagues, higher education institutions and relevant educational organisations.
5. Manpower-development programmes should be needs-based rather than routine, with training activities linked to curriculum changes, emerging technologies, assessment practices, classroom management and other current educational challenges.
6. School administrators should create opportunities for teachers to apply competencies acquired through professional development, since training is more likely to contribute to performance when teachers are provided with appropriate opportunities and resources to use newly acquired knowledge and skills.
7. Further studies should examine the combined eight-predictor model involving the four manpower-development variables and the four authority-delegation variables—supervisory, leadership, financial and academic duties—before conclusions are made concerning the joint prediction of manpower development and authority delegation.

Implications of the Findings

The findings have implications for educational administration and teacher professional development in Anambra State. First, the significant contribution of in-service training suggests that teacher development should be treated as a continuing organisational responsibility rather than as an occasional intervention. Second, the contribution of conference participation indicates the value of exposing teachers to professional networks and contemporary developments in education. Third, the significant contribution of research collaboration suggests that teachers' professional roles can extend beyond classroom instruction to include systematic inquiry into educational problems. Finally, the contribution of mentorship highlights the importance of interpersonal professional support within schools. Collectively, the findings suggest that teacher performance may be strengthened through a coordinated professional-development framework rather than through isolated training activities.



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