



Effect of Training and Development (T&D) on Employee Performance of Select Local Government Areas of Niger State, Nigeria

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ABSTRACT

Background: Employee performance is a critical determinant of organisational success, yet many public sector institutions in developing countries face persistent productivity challenges due to inadequate training and development (T&D) programmes.

Objectives: This study examined the impact of T&D on employee performance in Niger State, Nigeria, focusing on training frequency, staff skill acquisition, and implementation gaps.

Methods: A quantitative descriptive survey design was employed. Using Taro Yamane's formula, 399 employees from Lapai, Chanchaga, and Borgu Local Government Areas responded to a structured questionnaire with a 5-point Likert scale. Data were analysed using multiple regression (SPSS 25).

Results: T&D significantly enhanced employee performance ($R^2 = 0.937$, $p < 0.05$). Training frequency emerged as the strongest predictor ($\beta = 0.932$, $t = 76.726$, $p < 0.01$), followed by skill acquisition ($\beta = 0.819$, $t = 41.621$, $p < 0.01$) and implementation gap ($\beta = 0.875$, $t = 59.174$, $p < 0.01$). Employees receiving regular training demonstrated superior task efficiency and productivity.

Conclusions: T&D programmes are critical drivers of public sector performance. Regular training, job-relevant skill development, and effective post-training support mechanisms are essential to maximise productivity gains. Policymakers should institutionalise structured T&D initiatives aligned with organisational goals.

Unique Contribution: This study contributes to the broader field of human resource management and organizational development by examining how training and development initiatives influence employee performance in different local government contexts

Key Recommendation: recommends the institutionalization of regular training programs, alignment of training content with job-specific skill requirements, and the strengthening of post-training support mechanisms to reduce implementation gaps.

Keywords: Training and development, employee performance, public sector, Niger State, skill acquisition



INTRODUCTION

Employee performance, a critical indicator of organisational success in today's dynamic economy, encompasses the efficiency and effectiveness with which employees achieve organisational goals. It is typically measured through output quantity, quality, timeliness, and cost-effectiveness, and is closely linked to employee engagement and satisfaction (Makwana & Patange, 2022; Oginyi et al., 2023). Employees who find their work meaningful and well-managed are generally more productive (Gosnell et al., 2020). Employee performance is influenced by human resource practices, particularly training and development (T&D), which equip workers with the necessary knowledge, skills, and abilities to perform effectively (Dessalegn, 2022; Nwosu et al., 2018).

T&D programmes—ranging from on-the-job training to structured leadership development initiatives—are globally recognised for equipping employees with relevant skills, knowledge, and adaptability that directly influence performance. Organisations that invest in continuous training report up to 20% higher productivity compared to those with minimal training efforts (ILO, 2023). Prioritising T&D has also been associated with a 24% rise in employee engagement, which positively correlates with increased productivity, particularly in knowledge-driven economies (World Economic Forum, 2022). In developed countries such as the United States, Germany, and Japan, employee performance is underpinned by strong T&D frameworks, substantial budget allocations, and a culture of lifelong learning. Companies in these regions dedicate approximately 4.5% of their annual budgets to training, resulting in long-term productivity improvements of 15–25% (OECD, 2024).

In contrast, developing countries across Africa, Asia, and Latin America face challenges such as inadequate funding, infrastructural limitations, and varied educational standards that hinder the effective implementation of T&D. However, even within these constraints, training has demonstrated significant potential to improve employee performance. For instance, improvements in productivity levels of up to 12% have been recorded when training programmes were well-targeted and consistently delivered. Similarly, in Malaysia's electronics sector, relevant training content improved productivity by 15% as employees applied newly acquired skills to operational tasks.

Key factors such as training frequency, skill acquisition, and content relevance play a vital role in determining the success of T&D initiatives. Frequent training helps employees stay current with evolving work requirements. Skill acquisition, including digital literacy and policy analysis, improves speed and accuracy in task execution (Nsude & Nwafor, 2016). Relevance of training content ensures applicability to employees' roles, leading to measurable gains in performance (Zaw & Min, 2022). These factors are especially critical in public sector offices, where administrative and legislative duties require updated skills and consistent performance.

STATEMENT OF THE PROBLEM

Employee performance remains a global challenge, significantly influencing organisational success across sectors. In today's fast-evolving economy, low productivity often manifests



through reduced output, poor service delivery, and delayed task execution, ultimately undermining competitiveness and long-term growth. According to the International Labour Organisation (2023), approximately 40% of global firms experience performance shortfalls as employees lack the requisite skills for modern job functions, resulting in an estimated \$3 trillion in lost output annually. This performance crisis is often compounded by the absence of robust T&D programmes, leaving employees unprepared to adapt to evolving tools and processes.

In Nigeria, the issue of employee performance is particularly pronounced in the public sector. A report by the Federal Ministry of Labour (2024) reveals that public sector workers deliver only about 60% of expected performance due to outdated skills and entrenched bureaucratic barriers. A core driver of this problem is the ineffective implementation of T&D programmes. Only 25% of staff in public offices receive annual training, and of these, nearly 70% participate in programmes that are misaligned with their specific job functions. Limited funding, political interference in training selection, and a lack of systematic evaluation further constrain the effectiveness of T&D, leaving employees ill-equipped to meet growing performance expectations.

Although existing literature has examined the link between T&D and employee performance, significant contextual and methodological gaps remain. Studies such as those by Gosnell et al. (2020); Okoro and Nwafor, (2015) demonstrate T&D's benefits but do not address Nigeria's political dynamics and resource constraints. Similarly, Ofobruku and Nwakoby (2023) focus on private or specific public sectors, overlooking critical variables such as training frequency, skill relevance, and implementation gaps in Niger State's local government contexts. This study seeks to fill these gaps by employing a comprehensive quantitative approach to investigate the impact of T&D frequency, skill acquisition, and implementation challenges on employee performance in Lapai, Borgu, and Chanchaga Local Government Areas.

OBJECTIVES OF THE STUDY

The main objective of this study was to examine the impact of T&D on employee performance in Select Local Government Areas of Niger State, Nigeria. The specific objectives were to:

1. Examine how T&D frequency impacts employee performance in Select Local Government Areas of Niger State, Nigeria.
2. Investigate the relationship between staff skill acquisition and overall employee performance in Select Local Government Areas of Niger State, Nigeria.
3. Examine the implementation gap in T&D programmes and its impact on employee productivity in Select Local Government Areas of Niger State, Nigeria.



METHODS

Research Design

This study employed a quantitative descriptive survey design to systematically collect data from a large sample. A structured questionnaire was administered to gather information on T&D frequency, skill acquisition, and implementation gaps, enabling assessment of their effects on employee performance across Niger State's three senatorial districts.

Study Population and Sampling

The target population consisted of employees in senior, middle, and lower-level positions within Lapai, Chanchaga, and Borgu Local Government Areas of Niger State, Nigeria. With a combined population of 483,521 (Niger State Department of Budget and Planning). Using Taro Yamane's formula with a 5% error margin, a sample size of 399 was calculated and increased to 438 to account for non-response. Simple random sampling was employed to ensure every employee had an equal chance of selection, reducing selection bias and enhancing generalisability.

Data Collection Instrument

A structured, self-administered questionnaire adapted from Niati et al. (2021) was used. It comprised four sections: Section A collected demographic information (age, gender, job role); Sections B, C, and D addressed training frequency, skill acquisition, and content relevance, respectively. Responses were recorded using a 5-point Likert scale (1 = strongly agree, 5 = strongly disagree), facilitating accurate data coding and statistical analysis.

Validity and Reliability

Face and content validity were established through review by the research supervisor and public administration experts, ensuring the questionnaire accurately measured the intended constructs. Reliability was assessed using Cronbach's alpha, yielding a coefficient of 0.76, surpassing the 0.70 threshold recommended by Amos, confirming strong internal consistency.

Data Analysis

Data were analysed using SPSS 25. Descriptive statistics (frequencies, percentages, means) summarised respondents' perceptions. Inferential statistics included Spearman's correlation to assess relationships and multiple regression analysis to test hypotheses at a 0.05 significance level. The regression model was specified as: $EP = \beta_0 + \beta_1 TF + \beta_2 SA + \beta_3 IG + \varepsilon$

where EP = employee performance, TF = training frequency, SA = skill acquisition, IG = implementation gap, β_0 = intercept, $\beta_1 - \beta_3$ = coefficients, and ε = error term.



Ethical Considerations

Ethical approval was obtained from Ibrahim Badamasi Babangida University Lapai. Informed consent was secured from all participants, and confidentiality was maintained throughout. Participation was voluntary, and respondents could withdraw at any time without penalty.

RESULTS

Response Rate and Demographic Profile

Of 438 questionnaires distributed, 399 were completed and returned, representing a 91% response rate. The sample comprised 203 males (50.9%) and 196 females (49.1%), with 235 married (58.9%), 125 single (31.3%), and 39 divorced/widowed (9.8%). Age distribution showed 120 (30.1%) aged 18–30, 145 (36.3%) aged 31–40, 90 (22.6%) aged 41–50, and 44 (11.0%) aged 51+. Educationally, 175 (43.9%) held tertiary qualifications, 140 (35.1%) secondary, 60 (15.0%) primary, and 24 (6.0%) others. Religiously, 270 (67.7%) were Muslims, 120 (30.1%) Christians, and 9 (2.3%) traditional believers.

Descriptive Statistics

Respondents across the three local government areas showed varying perceptions of T&D impacts. In Lapai, 28.6% agreed that frequent training improves job performance, with 48.9% neutral. In Borgu, 24.1% agreed, with 52.6% neutral. Chanchaga exhibited the highest agreement at 43.6%, with 41.4% neutral. The grand mean of 3.14 indicated moderately positive perceptions. For skill acquisition, Lapai showed 45.1% agreement, Borgu 37.6%, and Chanchaga 56.4%, with a grand mean of 3.40, suggesting generally positive views. Regarding implementation gaps, financial and infrastructural barriers were prominent: Lapai (60.1%), Borgu (69.9%), and Chanchaga (48.9%) identified limited resources, with a grand mean of 3.51 reflecting widespread concern.



Correlation Analysis

			Training and development frequency	Employee performance	Skills Acquisition	Implementation Gap
Spearman's rho	Training and development frequency	Correlation Coefficient	1.000	.964**	.913**	.959
		Sig. (2-tailed)	.	.000	.000	.000
		N	399	399	399	399
	Employee Performance	Correlation Coefficient	.964**	1.000	.893**	.935
		Sig. (2-tailed)	.000	.	.000	.000
		N	399	399	399	399
	Skills Acquisition	Correlation Coefficient	.913**	.893**	1.000	.952
		Sig. (2-tailed)	.000	.000	.000.	.000
		N	399	399	399	399
	Implementation Gap	Correlation Coefficient	.959	.952	.935	1.000
		Sig. (2-tailed)	.000	.000	.000	.000
		N	399	399	399	399
**. Correlation is significant at the 0.01 level (2-tailed).						

Source: SPSS Output

Spearman's correlation analysis (n = 399) revealed strong positive relationships among variables. Training frequency correlated very strongly with employee performance ($\rho = 0.964$, $p < 0.01$), skill acquisition ($\rho = 0.913$, $p < 0.01$), and implementation gap ($\rho = 0.959$, $p < 0.01$). All correlations ranged from 0.893 to 0.964, indicating near-perfect associations and rejecting null hypotheses of no significant relationships.



Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.482	.045		10.097	.000
	Training and development frequency	.932	.012	.968	76.726	.000
	Skills Acquisition	.819	.020	.902	41.621	.000
	Implementation Gap	.875	.016	.935	59.174	.000

a. Dependent Variable: Employee performance

Source: SPSS Output, 2025

The regression model demonstrated a very strong fit ($R = 0.968$, $R^2 = 0.937$, Adjusted $R^2 = 0.937$), explaining 93.7% of variance in employee performance. The ANOVA result ($F = 5886.944$, $p < 0.01$) confirmed model significance. Coefficient analysis showed training frequency as the strongest predictor ($\beta = 0.932$, $SE = 0.012$, $t = 76.726$, $p < 0.01$), followed by implementation gap ($\beta = 0.875$, $SE = 0.016$, $t = 59.174$, $p < 0.01$) and skill acquisition ($\beta = 0.819$, $SE = 0.020$, $t = 41.621$, $p < 0.01$). All predictors significantly influenced employee performance.

Hypothesis Testing

H_{01} : Training frequency does not impact employee performance. Result: Rejected ($t = 76.726$, $p < 0.01$). Conclusion: Frequent T&D significantly enhances employee performance.

H_{02} : Staff skill acquisition does not affect employee performance. Result: Rejected ($t = 41.621$, $p < 0.01$). Conclusion: Skill acquisition significantly improves performance.

H_{03} : Implementation gap does not impact employee productivity. Result: Rejected ($t = 59.174$, $p < 0.01$). Conclusion: Reducing implementation gaps significantly boosts productivity.



DISCUSSION

This study examined the impact of training and development (T&D) on employee performance in Niger State, focusing on training frequency, skill acquisition, and implementation gaps. The results show that training frequency is the strongest predictor of performance, indicating that regular training enhances employee competence and adaptability. This finding agrees with Khan and Ahmed (2017), and Ofobruku and Nwakoby (2023), who reported positive productivity outcomes from structured training programmes. The relatively stronger effect observed in this study may reflect the limited baseline training opportunities in the public sector, where incremental increases can produce substantial gains.

Skill acquisition was also found to significantly influence performance, consistent with Gosnell et al. (2020), and Zaw and Min (2022), confirming that competency development is a key mechanism through which T&D improves productivity. In addition, implementation gaps significantly affected performance, supporting Nama et al. (2022), Vincent (2020), and Niati et al. (2021), who emphasized the importance of organizational support in translating training into workplace outcomes. The strong influence observed may be due to institutional constraints such as inadequate resources and weak supervisory follow-through. Overall, this study extends existing knowledge by demonstrating that training frequency, skill acquisition, and effective implementation must operate together to achieve measurable performance improvements in the public sector.

CONCLUSION

This study conclusively demonstrates that T&D programmes are critical drivers of employee performance in Niger State's public sector. Training frequency emerged as the strongest predictor, explaining 93.7% of performance variance, followed by skill acquisition and implementation gap reduction. The findings underscore that regular, job-relevant training, coupled with effective post-training support, significantly enhances employees' efficiency, competence, and productivity. In a context where only 25% of public employees receive annual training often misaligned with job functions these results highlight the urgent need for structured, consistent T&D initiatives.

The study's implications extend beyond Niger State, offering insights for public sector reform across Nigeria and similar developing contexts. By prioritising T&D as a strategic investment in human capital, policymakers can address persistent productivity challenges, improve service delivery, and foster a culture of continuous learning. However, success depends on overcoming systemic barriers such as inadequate funding, political interference, and weak evaluation mechanisms. Future research should explore longitudinal impacts of T&D, sector-specific interventions, and comparative analyses across public, private, and NGO contexts to further refine strategies for optimising employee performance through effective training and development.



Ethical clearance

Ethical consent was sought and obtained from the participants used in this study. They were made to understand that the exercise was purely for academic purposes, and their participation was voluntary.

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Conflict of Interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Authors' Contributions

AM: Conceptualization, methodology, data collection, analysis, and manuscript drafting. UM: Supervision, critical revision, and approval. All authors read and approved the final manuscript for publication and confer the rights to the corresponding author to make necessary changes and act as guarantor

Data availability statement.

The datasets on which conclusions were made for this study are available on reasonable request.

Citation

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