

Effect of Toxic Work Environment on Employee Performance in the Nigerian Institute of Leather and Science Technology (NILEST), Zaria

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Abstract

This study examined the effect of a toxic work environment on employee performance at the Nigerian Institute of Leather and Science Technology (NILEST), Zaria. Despite the institute's efforts to reduce the toxicity of the work environment, this socially undesirable behaviour persists. The study was underpinned by the Job Demands-Control-Support (JDCS) model. A survey research design was used in the study, and data were collected from 150 employees across eight departments through structured questionnaires. A stratified sampling design was used to draw the samples from the population. Simple linear regression was used to analyse the data collected from the respondents via SPSS version 25 at a 5% level of significance. The result revealed that a toxic environment has a significant negative effect on employee performance at NILEST. The study concluded that a toxic work environment significantly negatively affects employee performance at NILEST. The study recommended that the institution should implement transparent communication channels, establish zero-tolerance policies for workplace toxicity, create formal employee recognition programmes, and develop confidential reporting mechanisms for workplace harassment.

Keywords: Toxic work environment, employee performance, workplace stress, Nigeria, public sector.

Introduction

In modern-day organisations, the work environment has been identified as a major determining factor of employee well-being as well as the effectiveness of the organisation. By definition, a toxic work environment refers to a condition in the workplace that is characterized with persistent negative behaviours, bad leadership, absence of support, and unhealthy interpersonal relationships, which negatively affect the psychological safety of employees, their motivation, and their level of productivity (Tasta, 2017). An environment characterised by these factors creates unfairness and situations that are harmful to the employees, which leads to employee disengagement, emotional exhaustion, and decline in the level of performance (Chapman et al., 2014).

A toxic environment is reflected through several dimensions. As opined by Rasool et al. (2021), these dimensions include harassment, ostracism and incivility. These dimensions individually create an atmosphere where employees feel psychologically ill, undervalued and demotivated. Hence, the pervasiveness of toxic work environments across the globe raises a concern, especially since it has economic implications. In America, the Workplace Bullying Institute (2023) reported that 19% of American workers were victims of abusive conduct at work, and 65% of these bullies are in positions of authority.

In Nigeria, there have been persistent challenges in the labour market, such as skills mismatch, limited opportunities for formal employment, and difficulties in absorbing the growing labour force (International Labour Organisation, 2023). The rate of unemployment in Nigeria stood at 33.3% in the 4th quarter of 2020 (National Bureau of Statistics, 2023). These pressures in the labour market strengthen the dependence of employees on available employment and create conditions in which workers have low bargaining power to challenge toxic practices. This situation is specifically relevant to organisations in the public sector where there is the presence of bureaucracy and administrative procedures which shape the experience of employees about their work environment. Hence, the presence of these conditions provides an important context to examine the effect of a toxic work environment within specific Nigerian organisations.

The Nigerian Institute of Leather and Science Technology (NILEST), Zaria, is an institution that represents a critical case for examining toxic work environment within the Nigerian public sector research institutions. The institution was established in 1964 and was reorganised multiple times to its current form in 2011. The institution operates with a mandate of providing training, research, and development in leather and science technology. Just like many Nigerian public institutions, NILEST faces challenges such as inadequate funding, outdated infrastructure, bureaucratic constraints, and systemic inefficiencies that contribute to workplace toxicity.

The effectiveness of any organisation is determined by employee performance. This is especially true in research institutions like NILEST that require innovation, precision, and intellectual efforts. In NILEST, employee performance is indispensable for advancing leather science and technology in Nigeria. However, strong indications show that workplace factors such as a toxic work environment undermine productivity and well-being in the institution. According to Anjum et al. (2018), a condition of psychological distress, reduction in organisational commitment, and disengagement is created when the working environment is toxic. Specifically at NILEST, preliminary investigation reveals evidence of toxic elements within the organisational culture, such as poor communication between management and staff, favouritism in recognition and promotion, and interpersonal conflicts. These issues, if not addressed, will negatively affect motivation, collaboration, and decrease organisational performance. However, there is a knowledge gap among the management of NILEST and similar institutions on these issues of a toxic environment. Hence, with the absence of empirical evidence that shows the specific toxic elements and how they affect performance, interventions will likely remain speculative and will fail to tackle the underlying causes of employee disengagement and lower performance. Hence, this study aims to determine the effect of a toxic environment on the performance of employees in NARICT. To achieve this objective, the study raises the following question: To what extent does a toxic work environment affect employee performance at NILEST, Zaria? Based on the objective and research question, the following hypothesis was developed in null form:

H0₁: Toxic work environment has no significant effect on employee performance at the Nigerian Institute of Leather and Science Technology, Zaria.

Literature Review and Theoretical Framework

Concept of Toxic Work Environment

In contemporary organisational research, the concept of toxic work environment receives continued attention. For instance, according to Sari and Dudija (2024), workplace toxicity refers to behaviours that are harmful and whose outcomes negatively affect employee well-being as well as performance. These behaviours include bullying, harassment, ostracism and incivility.

Two types of toxic work environment were identified by Tastan (2017). These are: behavioural toxicity and contextual toxicity. First, behavioural toxicity includes behaviours exhibited by co-workers and managers, while contextual toxicity consists of social-structural toxicity as well as toxic climate. In another effort, Rasool et al. (2021) identified four dimensions of workplace toxicity, and these are:

- i. **Workplace Harassment:** Workplace harassment refers to a situation where co-workers and supervisors threaten and poorly treat employees. Such behaviours include inappropriate comments regarding physical appearance, sexual jokes, and any attempt by co-workers or supervisors to meddle in the personal and sexual lives of individuals, which violates privacy and professional ethics (Hetrick, 2023).
- ii. **Workplace Bullying:** According to Rasool et al (2021), workplace bullying consists of any act of mistreatment by individuals or groups, such as cyberbullying, unjust criticism that creates pressure and injustice. Some of the indicators of this behaviour include assigning inappropriate tasks to the employee, excessive micromanaging of the employees, unfair criticism of performance, and blaming employees unfairly.
- iii. **Workplace Ostracism:** This refers to the feeling of isolation by the employees, which leads to unproductive behaviours, which then affects efficiency as well as innovation (Samma et al., 2020). Loneliness is experienced by employees as a result of ill treatment from co-workers, family, stakeholders, and supervisors, which consequently leads to job dissatisfaction and employee turnover.

Concept of Employee Performance

Employee performance refers to the extent to which employees effectively and efficiently discharge the responsibilities assigned to them, leading to the achievement of organisational objectives. Afandi (2021) states that performance is characterised by an individual or group's readiness to carry out or improve tasks within their duties, ultimately reaching intended results. Employee performance is often measured using indices the organisation sets as performance indicators, which may include timely task completion, employee attendance, ability to work in a group, strict adherence to work ethics, greater creativity in handling jobs, etc. However, employee performance is not only limited to the successful completion of assigned tasks. This is because Koopmans et al. (2021) broadened the concept by making an effort to distinguish between task performance, contextual performance and adaptive performance. According to them, task performance has to do with how effective employees are in carrying out the activities that directly relate to their jobs. Contextual performance refers to the voluntary behaviours which support the social and organisational environment. Lastly, adaptive performance refers to the ability of the employees' ability to make adjustments to the requirements of the work.

Hence, the views of Afandi (2021) and Koopmans et al. (2021) are seen as complementary rather than contradictory. Afandi (2021) places more emphasis on the completion of assigned responsibilities and activities, while Koopmans et al. (2021) emphasise that employee performance goes beyond the accomplishment of activities but also involves behaviours that support the functioning of the organisation as well as the ability to respond to changing work conditions. These

different arguments mean that the concept of performance should be viewed as a multi-dimensional variable. Based on the reviewed literature, this study conceptualises employee performance at NILEST as a multidimensional construct consisting of productivity, motivation, job satisfaction and innovation. This is deemed appropriate for assessing the contributions of the employees to the performance of NILEST.

Empirical Review

Several efforts have been made to examine the relationship between toxic work environment and employee performance. For instance, Anjum et al. (2018) conducted a study to determine the effect of toxic workplace environments on job productivity in the Pakistani manufacturing sector. The study's findings revealed significant negative relationships between workplace toxicity and employee productivity. The study specifically reveals that bullying, harassment, and poor interpersonal relationships negatively affect employee performance. In another effort, Rasool et al. (2021) investigated how toxic workplace environments affect employee engagement, using organisational support and employee well-being as mediating variables. The study used a sample of 384 employees to collect data in the Chinese service sector. The study findings revealed that harassment, bullying, ostracism, and incivility significantly lead to a decline in employee engagement, and employee well-being was found to partially mediate these relationships.

Puteh et al. (2021) conducted a study to establish a relationship between workplace conditions and employee performance at PT. Plantation Nusantara IV in Indonesia. The study used the Kendall Tau test, which is a non-parametric analysis. The findings revealed a negative correlation between job stress factors and employee performance. This reveals that poor workplace conditions lead to a decline in performance. Again, Sari et al. (2021) investigated the relationship between job stress and productivity in the manufacturing sector of Indonesia. The study used a sample of 93 employees to collect data. The study used regression analysis to analyse the data collected from the sampled employees. Results found that job stress had a positive and significant effect on employee performance.

Zangmo and Chhetri (2022) examined the primary causes of workplace stress and how it affects employee performance in the Bhutanese Ministry of Health. The findings revealed that a bad work environment is a significant cause of stress. The findings revealed a negative correlation between stress and employee performance. Biodun et al. (2021) also examined how stress affected the performance of employees. The findings revealed that stress that is caused by poor time management and work overload affects employee performance.

However, the review of literature reveals that there are limited studies that specifically quantified the relationship between toxic work environment and employee performance in NILEST.

Theoretical Framework

This study is grounded in the Job Demands-Control-Support (JDCS) model, which was developed originally by Karasek (1979) and extended by Karasek and Theorell (1990). According to the model, workplace strain results from the interaction between job demands, decision latitude, and social support. According to the model, job demands include physical, social, or organisational aspects of the job that require physical or mental effort. Job control represents the ability of employees to influence the activities of their work and, as well, make decisions about the completion of tasks. Workplace social support refers to helpful relationships with supervisors and coworkers regarding job-related matters. However, in the context of this study, toxic work

environment corresponds directly to the absence of workplace social support and it represents active antagonism rather than inadequate support.

According to the JDCS model, even when job demands are moderate in the work environment, the presence of toxic elements increases strain and will reduce performance by undermining the psychological safety that is necessary for functioning. Additionally, toxic environments are capable of reducing employees' perceived control over their work circumstances.

Methodology

The study employed a quantitative approach using a cross-sectional survey design to determine the effect of a toxic environment on employee performance in NILEST. The choice of the design was informed by the fact that it allowed for the collection of data at a single point in time and allowed for the collection of data from a representative sample of employees in the different departments of NILEST.

The target population comprised employees from eight departments at NILEST, Zaria: Administration, General Studies, Computer Science, Finance and Accounting, Science and Lab Technology, Polymer Technology, Foot and Wear Technology, and Leather Technology. The total population was 238 employees.

To determine the sample size of the study, Krejcie and Morgan's (1970) table for sample size determination was used. According to the table, a population of 238 requires a minimum sample of 148. Due to the likelihood of non-response, 10% was added, which brings the total target population to 163. Hence, a total of 163 samples were used for the study. The study used the stratified sampling design to draw the samples and distribute the questionnaire across the different departments of the institution. Simple random sampling was then used to draw the samples from each department by ensuring an equal chance of selection.

The research instrument used to collect data was a structured questionnaire which was adapted to suit the NILEST context. To ensure the validity of the instrument, content validity was assessed. This was done through subject matter experts in organisational behaviour and human resource management. Their feedback was used to refine the wording of the questionnaire items to ensure comprehensive coverage of the constructs.

On the other hand, reliability was assessed using Cronbach's Alpha coefficient. The independent variable, which is Toxic Work Environment, has a coefficient of 0.82, while the dependent variable, Employee Performance, has a coefficient of 0.79. This means that all the variables are reliable as their respective constructs are above the threshold of 0.7.

Data of the study were analysed using both descriptive and inferential statistics using SPSS Version 25. Descriptive statistics were used to summarise the demographic profile of the respondents and questionnaire responses. To test the hypothesis developed for the study, simple linear regression was employed. Simple linear regression was used because the objective of the study is to determine the effect of a toxic work environment on employee performance. The mathematical representation of the regression model is provided as follows:

$$Y = \beta_0 + \beta_1 X + \varepsilon$$

Where:

Y = Employee Performance

X = Toxic Work Environment

β_0 = Intercept

β_1 = Regression coefficient

ε = Error term

The decision rule for simple linear regression is that when the p-value is less than 0.05, the null hypothesis is rejected, and when it is greater than 0.05, the null hypothesis is accepted.

Descriptive Statistics of the Questionnaire Items

Table 1: Descriptive Statistics of Items Measuring Toxic Work Environment on Employee Performance

	Questionnaire Item	SD (1)	D (2)	N (3)	A (4)	SA (5)	Total
TWE1	My workplace has a culture of gossip/favouritism	9	15	18	65	43	150
TWE2	Poor communication exists between staff and management	7	11	17	70	45	150
TWE3	I feel undervalued or unappreciated at work	8	13	20	65	44	150
TWE4	The work environment is demotivating	6	10	17	68	49	150
TWE5	I experience bullying or harassment	2	15	25	58	40	150

Source: SPSS Output (2025).

Table 1 reveals the responses of the participants regarding the questionnaire items. In TWE1, the respondents have a 72% perception of gossip/favoritism, a 76% perception of poor communication and for TWE3 and TWE4, the employees perceived over 72% agreement of feeling undervalued and demotivated. Lastly, TWE5 was perceived by 65% of the respondents. These conditions reduce motivation as well as the performance of employees.

Test of Hypothesis

H₀₁: Toxic work environment has no significant effect on employee performance at NILEST, Zaria.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error
1	0.580	0.336	0.328	0.715

a. Predictors: (Constant), TWE

Source: SPSS Output (2025).

The model summary shows an R² of 0.336. This reveals that 33.6% of the change in employee performance in NILEST is explained by toxic work environment. This means the remaining 66.4% is explained by other factors.

Table 3: ANOVA table

ANOVA					
Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	40.20	1	40.20	78.60	0.000
Residual	79.44	98	0.811		
Total	119.64	99			
a. Dependent Variable: EMP					
b. Predictors: (Constant), TWE					

Source: SPSS Output (2025).

The ANOVA table shows the fitness of the model from a statistical perspective. The significant value of 0.000 shows that the model is fit, meaning that there is a useful linear model between the variables considered

Table 4: Coefficients Table

Coefficients					
Model	B	Std. Error	Beta	t	Sig.
(Constant)	4.025	0.219		18.38	0.000
Toxic Work Environment	-0.580	0.065	-0.580	-8.86	0.000

a. Dependent Variable: EMP

Source: SPSS Output (2025)

The coefficient table shows that toxic work environment has a significant negative effect on the performance of employees in NILEST Zaria ($\beta = -0.580$, $T = -8.86$, $p < 0.001$). This is because the p-value is less than the 5% level of significance. Hence, the hypothesis is rejected at the 5% level of significance. The result further revealed that as toxic work environment increases, the performance of employees in NILEST decreases.

Theoretical Implications

The findings provide strong support for the Job Demands-Control-Support (JDCS) model. Toxic work environment, as measured in this study, represents a fundamental failure of workplace social support; indeed, it represents active antagonism rather than merely absent support. The model predicts that such conditions, even in the absence of high job demands, will increase strain and reduce performance. At NILEST, the combination of high perceived toxicity (poor support) with the inherent demands of research and technical work creates conditions for iso-strain, the most adverse configuration in the JDCS framework.

Conclusion and Recommendations

This study examined the effect of a toxic work environment on the performance of employees in NILEST Zaria. The result using simple linear regression revealed that a toxic work environment has a significant negative effect on employee performance in NILEST. As shown by the descriptive statistics of the questionnaire items, about three-quarters of employees reported experiences of workplace toxicity in the organisation. The finding provides significant

implications for NILEST and sister organisations. Specifically, the presence of a toxic workplace environment undermines the well-being of the employees and also impedes the achievement of the overall organisational objectives. Hence, addressing workplace toxicity should be a priority for the institution.

Recommendations

Based on the findings and conclusion of the study, the following recommendations are put forward:

1. The management of NILEST should implement regular departmental meetings, town hall sessions, and transparent decision-making processes to address the poor communication identified by respondents.
2. The management of the institution should implement transparent recognition as well as reward systems. This can be done through the development of a formal employee recognition programme with transparent criteria for performance evaluation and reward allocation.
3. Lastly, the institution should develop zero-tolerance anti-harassment policies accompanied by explicit definitions of prohibited behaviours and consequences for violations.

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