International Journal of Academic Multidisciplinary Research (IJAMR)
ISSN: 2643-9670
Vol. 10 Issue 6 June - 2026, Pages: 299-307

Impact of Physical Facilities Provided by Tertiary Education Trust Fund (TETFund) on Job Satisfaction of Employees in Tertiary Institutions in Nigeria

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Abstract: *This study examined the impact of physical facilities provided by the Tertiary Education Trust Fund (TETFund) on the job satisfaction of academic and non-academic employees in tertiary institutions in Nigeria. A survey research design was adopted in the study. The population comprised staff of public tertiary institutions within Nigeria's South/South geopolitical zone, with a sample of 300 respondents purposively selected from institutions that had benefited from TETFund physical infrastructure projects completed within the last 5–10 years. Data were collected using a 20-item structured questionnaire that was validated by two experts with reliability coefficient of .85. Descriptive statistics mean and standard deviation were used to answer the research questions. T-test was employed to test the hypothesis. Anchored on Herzberg's Two-Factor Theory, Job Characteristics Model, and Person-Environment Fit Theory, the study established that physical facilities significantly influence employee job satisfaction by enhancing teaching effectiveness, research productivity, workplace safety, and institutional efficiency. Findings revealed that to high extent TETFund-supported facilities improve job satisfaction. Physical facilities influence various dimensions of job satisfaction, including staff morale, motivation, comfort, and performance. TETFund-sponsored technology and equipment significantly enhance job satisfaction. TETFund-supported facilities significantly contribute to workplace safety. The hypothesis test indicated no significant difference between teaching and non-teaching staff responses regarding the role of physical facilities in overall job satisfaction ($p > .05$). The study concluded that while infrastructure alone may not fully determine job satisfaction, it remains a critical determinant of employee well-being and institutional success. Recommendations included sustainable maintenance culture, inclusive infrastructure planning, and data-driven facility management strategies to ensure long-term effectiveness and improved staff satisfaction in Nigerian tertiary institutions.*

Keywords: TETFund, Physical Facilities, Job Satisfaction, Tertiary Institutions, Infrastructure Development, Workplace Environment, Nigeria.

Introduction

The development of every society is fundamentally dependent on the quality, capacity, and productivity of its workforce. Human resources constitute the backbone of social, economic, and institutional progress because all forms of development are ultimately driven by human effort, regardless of the level of mechanization or technological advancement available. While machines, tools, and infrastructure contribute significantly to production processes, they remain dependent on human operation, supervision, and innovation. Consequently, sustainable societal growth is largely determined by the effectiveness of human resources in utilizing available material resources for collective advancement (Armstrong, 2020). In both public and private sectors, human beings remain the central actors in planning, implementing, and sustaining developmental initiatives. This explains why human resources are often described as the most valuable asset of any organization or nation.

In public service, human resources play an especially crucial role because the sector directly influences governance, public welfare, and service delivery. Public service encompasses the provision of essential services that benefit citizens, including education, healthcare, administration, and security. Within government institutions, public servants particularly career civil servants are responsible for policy implementation and societal development (Olaopa, 2018). In the educational sector, academic and non-academic staff serve as critical human resources who utilize educational facilities to deliver teaching, research, administration, and community service. Their productivity directly affects the quality of education, innovation, and national development. Thus, the realization of sustained development in any society is heavily reliant on the efficiency, competence, and satisfaction of its workforce.

Human resources are individuals recruited into organizations to collectively achieve institutional goals. These employees may include skilled, semi-skilled, and unskilled workers who contribute their intellectual, physical, and emotional capacities toward organizational productivity. Mills (1995) emphasized that every worker enters an organization with a range of resources, including physical energy, creativity, responsibility, and self-directed behavior. Effective management therefore seeks to create conducive working environments that maximize these human potentials by fostering innovation, motivation, and productivity. In tertiary institutions, this involves ensuring that staff operate within supportive physical and psychological environments that enhance performance.

Tertiary institutions are knowledge-intensive organizations where human capital and physical facilities interact to produce educational outcomes through teaching, research, and community service. However, Nigeria's tertiary education sector has historically suffered from infrastructural deficits characterized by dilapidated classrooms, overcrowded lecture halls, inadequate laboratories, poorly equipped libraries, and unstable utility services (World Bank, 2021). These infrastructural challenges have negatively impacted both staff productivity and student learning outcomes. To address these deficiencies, the Nigerian government established the Tertiary Education Trust Fund (TETFund) as a strategic intervention agency tasked with financing infrastructural development, academic staff training, research, and institutional capacity building across public tertiary institutions (TETFund, 2022). Through its interventions, TETFund has significantly improved the physical infrastructure landscape of Nigerian tertiary institutions by funding the construction of classrooms, administrative offices, hostels, laboratories, ICT centers, and other facilities essential for institutional effectiveness.

The provision of physical facilities is critical because workplace conditions significantly influence employee motivation, satisfaction, and productivity. Herzberg's Two-Factor Theory identifies physical working conditions as hygiene factors necessary to prevent dissatisfaction, while the Job Characteristics Model suggests that environmental support enhances meaningfulness and responsibility in work performance (Herzberg et al.1959; Hackman & Oldham, 1976). Kreitner and Kinicki (2002) further noted that employees are more satisfied when they perceive their work environment as conducive, supportive, and aligned with their professional needs. In tertiary institutions, staff who work in modern classrooms, functional laboratories, safe offices, and reliable utility environments are more likely to experience job satisfaction than those working under poor infrastructural conditions.

Job satisfaction refers to the pleasurable emotional state resulting from an employee's appraisal of their job experiences (Locke, 1976). It reflects how employees feel about their work, including factors such as work conditions, remuneration, interpersonal relationships, and institutional support. Ade-Ojo (2023) described job satisfaction as a state of contentment and positive emotional response that arises when employees perceive their jobs as rewarding and meaningful. In educational institutions, physical facilities significantly shape this satisfaction because they influence employees' daily experiences, efficiency, safety, and psychological well-being. Staff who work in poorly ventilated offices, overcrowded classrooms, or inadequate laboratories often experience stress, frustration, and reduced morale, while those in well-maintained environments report increased productivity, commitment, and organizational loyalty.

Physical facilities therefore serve as essential determinants of employee work conditions. They include classrooms, laboratories, office spaces, libraries, furniture, ICT infrastructure, and utility services such as electricity and water supply. These facilities not only support job performance but also communicate institutional value and support to employees. According to Social Exchange Theory, visible organizational investments in staff welfare such as quality infrastructure—strengthen employees' affective commitment and satisfaction by signaling institutional care and support (Cropanzano & Mitchell, 2005). Conversely, deteriorating facilities may signal neglect, reducing morale and weakening organizational commitment.

In Nigeria, the government remains the primary provider of educational infrastructure, but financial limitations have necessitated the intervention of agencies such as TETFund. Since its establishment, TETFund has become a cornerstone of tertiary education development by addressing infrastructural decay and improving the quality of institutional environments nationwide (TETFund, 2022). Its interventions have transformed many institutions by providing modern facilities that improve teaching effectiveness, research productivity, administrative efficiency, and staff welfare. The presence of these facilities has raised important questions regarding their broader influence on employee job satisfaction, especially among academic and non-academic staff.

Therefore, understanding the impact of TETFund supported physical facilities on employee job satisfaction is essential for educational policy, institutional management, and workforce sustainability. By improving work environments, TETFund investments may not only enhance physical productivity but also foster psychological satisfaction, reduce absenteeism, and strengthen institutional performance. This underscores the strategic relationship between infrastructure development and human resource effectiveness in tertiary institutions.

Research Questions

1. To what extent do TETFund supported physical facilities improve staff job satisfaction in tertiary institutions in Nigeria?
2. Through what mechanisms (e.g., space, comfort, sanitary) do physical facilities influence different facets of job satisfaction in tertiary institutions in Nigeria?
3: To what extent does TETFund supported technology and equipment provide job satisfaction in tertiary Institutions in Nigeria?
4: What is the impact of TETFund supported facilities in providing safety environment in the tertiary Institutions in Nigeria?

Hypothesis

Ho: There is no significant mean difference between responses of teaching and non-teaching staff on TETFund supported physical facilities in overall job satisfaction of staff in tertiary institutions in Nigeria.

Literature

Facilities and Job Satisfaction

Research across higher education institutions and public organizations consistently demonstrates that the quality of physical work environments significantly influences employee job satisfaction, absenteeism, productivity, and retention. The workplace environment encompasses not only the physical structures such as offices, classrooms, laboratories, and libraries, but also the broader ecosystem of safety, comfort, accessibility, and resource availability that shapes employees' day-to-day experiences (Vischer, 2007). In tertiary institutions, where academic and administrative responsibilities require sustained intellectual engagement, physical infrastructure plays a critical role in supporting effective service delivery and employee well-being.

Globally, studies indicate that quality workspace design enhances worker motivation by promoting physical comfort, safety, and functionality. Comfortable offices, adequate ventilation, ergonomic furniture, stable utilities, and aesthetically appealing environments positively affect workers' morale and commitment (Kamarulzaman et al., 2011). According to Vischer (2007), physical work environments directly influence employees' psychological responses by shaping their perceptions of organizational support and professional worth. Employees who perceive their workplaces as safe, comfortable, and resourceful are more likely to exhibit higher levels of satisfaction, engagement, and productivity.

In the African context, empirical studies similarly reveal strong associations between infrastructure adequacy and employee morale. Poor physical infrastructure, including inadequate classrooms, obsolete equipment, overcrowded offices, and unreliable utility systems, has been linked to occupational stress, reduced teaching effectiveness, and lower institutional commitment (Ekpoh, 2018). Conversely, improved infrastructure supports task efficiency, enhances staff identity and pride, fosters collaborative interaction, and addresses health and safety concerns. These dimensions are essential because they collectively shape employees' perceptions of organizational quality and influence their willingness to remain productive within the institution.

The impact of physical facilities on job satisfaction can be categorized into four major dimensions. First, physical comfort and safety are fundamental, as factors such as lighting, temperature regulation, air quality, and ergonomic workspace design reduce fatigue and improve concentration (Vischer, 2007). Second, task effectiveness depends on the availability of tools, equipment, and functional workspaces that enable staff to perform their duties efficiently. Third, aesthetic quality and institutional image foster pride, confidence, and a sense of belonging among employees. Fourth, collaborative spaces and secure environments enhance social interaction, teamwork, and organizational cohesion (Reviana et al., 2024).

Within Nigeria, the state of tertiary institution infrastructure has historically been challenged by underfunding, poor maintenance, and rapid expansion of student populations. Institutional reports and case studies frequently attribute improvements in teaching, research, and administrative performance to targeted infrastructural interventions by the Tertiary Education Trust Fund (TETFund), which has become a critical government agency for educational development (TETFund, 2022). TETFund has significantly contributed to the construction and rehabilitation of classrooms, laboratories, office complexes, libraries, and ICT centers, thereby improving institutional functionality. However, literature also identifies persistent challenges such as uneven distribution of projects, delays in execution, maintenance deficits, and inconsistent utility support, which can limit the long-term satisfaction benefits of infrastructure interventions (Adeola, 2018).

Adeola (2018) and Onyango (2020) both found that physical facilities have a substantial positive impact on employee job satisfaction. Onyango (2020), drawing from comparative findings in the United States, reported that approximately 90% of employees believed workplace design and layout contributed significantly to improved performance. This underscores the global recognition of environmental quality as a major determinant of employee effectiveness. Onyango further highlighted psychosocial support as an important factor that directly influences job satisfaction, indicating that physical facilities should be integrated with supportive institutional culture. Similarly, Reviana et al. (2024) found in their study of public institutions in Cimahi City that comfortable physical work environments significantly improved employee productivity and satisfaction. Their findings reinforce the idea that workplace comfort and infrastructure quality are statistically significant predictors of job satisfaction across sectors. Ekpoh (2018) and Shetty et al. (2025) also established strong relationships between school physical environments and teachers' job performance, emphasizing that educational productivity is highly dependent on conducive physical settings. Comparable findings in healthcare settings reveal that physical hospital environments similarly enhance employee satisfaction, reduce attrition, and improve service delivery, suggesting that infrastructure quality is universally relevant across public service sectors.

School security is another vital dimension of physical facilities. Effective institutional security involves a comprehensive combination of physical infrastructure such as perimeter fencing, lighting systems, surveillance technologies, access control mechanisms, and trained security personnel (Ekwueme, 2025). Secure educational environments reduce threats, protect institutional assets, and foster psychological safety among staff and students. Ekwueme (2025) argued that physical security measures significantly improve institutional discipline, operational efficiency, and employee confidence. Facilities such as alarm systems, CCTV, controlled gates, and burglary prevention structures contribute not only to security but also to employee peace of mind, thereby positively influencing job satisfaction.

Moreover, reliable utilities such as electricity, water supply, internet access, and maintenance systems are critical in sustaining the effectiveness of physical infrastructure. Without these supporting systems, even modern facilities may fail to deliver expected satisfaction outcomes. Literature consistently emphasizes that infrastructural development must be accompanied by sustainable maintenance culture and institutional responsibility to preserve long-term benefits (Kreitner & Kinicki, 2002). This is an area where TETFund's interventions continue to face implementation challenges despite significant achievements.

In summary, evidence strongly supports the conclusion that physical facilities are essential determinants of employee job satisfaction in tertiary institutions. They influence staff well-being through comfort, safety, task effectiveness, organizational pride, collaboration, and security. In Nigeria, TETFund has played a transformative role in addressing infrastructural deficits, but sustained impact requires equitable distribution, regular maintenance, and integrated utility support. Therefore, physical facilities should be viewed not merely as structural investments but as strategic human resource enablers that contribute to workforce satisfaction, institutional productivity, and national development.

1. **Herzberg's Two-Factor Theory by Fredrick Herzberg (1959)**

Herzberg theorized that what motivates workers to do work is not necessarily what de-motivates them. He stated that what motivates an individual worker does not satisfy the worker, therefore, what does not satisfy cannot lead to dissatisfaction and should not be opposite to the other. He proposed that what may lead to positive job attitude is different from what (factors) that may lead to negative attitude to work. Herzberg distinguishes hygiene factors (whose absence causes dissatisfaction) from motivators (which create satisfaction). Physical facilities function primarily as hygiene factors: inadequate facilities (leaking roofs, broken furniture, non-functional labs) produce dissatisfaction, while adequacy removes barriers and allows motivators (achievement, recognition, growth) to operate. TETFund investments, by alleviating infrastructural deficits, reduce dissatisfaction and indirectly enable intrinsic motivators.

2. **Job Characteristics Model (JCM) by Hachman and Oldham (1976)**

The JCM posits that core job dimensions (skill variety, task identity, task significance, autonomy, feedback) drive critical psychological states that lead to motivation and satisfaction. Facilities shape the feasibility and quality of these job dimensions: for example, modern laboratories enable authentic, identity rich tasks; flexible classrooms support active learning; and reliable ICT and power enhance autonomy in course delivery and research.

3. **Person-Environment (P-E) Fit by kaklauskas and Gudauskas (2016)**

Person-Environment (P-E) Fit highlights match between individual needs/values and environmental supplies. It emphasized architectural planning and design process whereas staff members' needs for safety, comfort, tools, and professional identity must align with the campus environment. Well-designed facilities improve supplies (e.g., ergonomic furniture, climate control, and assistive technologies), increasing perceived fit and satisfaction. These theories are reliable in expressing that educational facilities can determine job satisfaction among workers in the educational institutions and also can serve as motivators for enhancement.

Significance of the Study

Understanding the facility-satisfaction linkage helps TETFund and institutions prioritize investments that deliver the greatest human-capital returns. It also informs lifecycle planning, ensuring that infrastructure translates into sustainable improvements in teaching/ learning and welfare rather than short-lived gains. The study is intended to benefit governments who appreciated the efforts of TETFund, and employ institutions to seek ways of improving quality of infrastructure as well as scholars who will encourage other stakeholders in maintaining available facilities. This work will also be beneficial to Tertiary Education Trust Fund (TETFund) who will use the outcome of this research to assess its interventions.

Conceptual Clarifications

Job Satisfaction: this is multidimensional construct reflecting affective and cognitive evaluations of one's job. Facets commonly include satisfaction with work conditions, supervision, pay and benefits, growth opportunities, recognition, and work–life balance. In this study, the focus is on work conditions and related infrastructural facilities, which are most sensitive to the physical environment.

Physical Facilities: this means tangible built environment components that enable institutional functions, which include lecture halls, classrooms, laboratories and workshops, studios, libraries, staff offices, departmental buildings, student support spaces, ICT centers, campus roads and drainage, water and sanitation, power and alternative energy, and safety infrastructure (fire protection, accessibility features, and surveillance).

TETFund Interventions: this relates to capital projects and equipment procurement that enhance the physical environment such as construction/rehabilitation of buildings, provision of furniture, laboratory and ICT equipment, and utilities improvements. Other important TETFund lines of project include staff development, research and sponsorships which are outside the physical facility focus of this work.

Methodology

This study employed survey research design to examine the impact of TETFund-provided physical facilities on employee job satisfaction in Nigerian tertiary institutions. The population included academic and non-academic staff from public tertiary institutions in Nigeria's South/South zone, particularly those with TETFund-supported projects completed within the last 5–10 years.

A sample of 300 respondents was selected using purposive random sampling the study. Data were collected using a structured questionnaire of 20-item in a 4-point rating scale titled 'Impact of TETFund Physical Facilities on Employee Job Satisfaction Questionnaire (ITPFEJSQ)', validated by two research experts from the Federal College of Education (Technical), Omoku. Reliability was established through test-retest procedures which yielded a coefficient of .85 considered sufficient for the study. Descriptive statistics, including mean and standard deviation, answered research questions, while independent t-test was used to test the hypotheses at a .05 significance level. Data analysis was conducted using SPSS version 23.0 to ensure accurate interpretation of findings.

Results of Findings

Research Question I: To what extent do TETFund-supported physical facilities improve job satisfaction in the Tertiary Institution in Nigeria?

Table 1: Mean and Standard Deviation Analysis on TETFund-Supported Physical Facilities and Staff Job Satisfaction

S/N	Item Descriptions	N	Mean	SD	Remark
1	TETFund-supported office buildings and classrooms improve staff comfort and job satisfaction.	300	2.96	.742	Agree
2	Modern physical facilities provided through TETFund enhance staff productivity and morale.	300	3.02	.758	Agree
3	Availability of functional lecture halls and workspaces contributes to staff effectiveness in tertiary institutions.	300	2.91	.731	Agree
4	TETFund-supported infrastructural development improves the quality of the working environment for staff.	300	3.05	.769	Agree
5	Adequate physical facilities motivate academic and non-academic staff toward improved job performance.	300	2.98	.751	Agree
	Grand Mean	**300**	**2.98**	**.750**	**Agree**

The result in Table 1 revealed a grand mean of 2.98, which is above the criterion mean of 2.50, indicating that respondents agreed that TETFund-supported physical facilities significantly improve staff job satisfaction in tertiary institutions in Nigeria. The findings imply that modern office spaces, lecture halls, and infrastructural facilities contribute positively to staff comfort, morale, productivity, and effectiveness in the workplace.

Research Question 2: Through what mechanisms (e.g., space, comfort, sanitary) do physical facilities influence different facets of job satisfaction in tertiary institutions in Nigeria?

Table 2: Mean and Standard Deviation Analysis on Mechanisms through which Physical Facilities Influence Job Satisfaction

S/N	Item Descriptions	N	Mean	SD	Remark
6	Adequate office space provided through TETFund improves staff concentration and work efficiency.	300	3.01	.764	Agree
7	Proper ventilation and comfortable working conditions enhance staff motivation and satisfaction.	300	2.95	.748	Agree
8	Availability of sanitary facilities contributes to positive staff attitudes toward work.	300	3.08	.772	Agree
9	Well-maintained physical facilities reduce workplace stress and improve staff morale.	300	2.97	.741	Agree
10	Conducive physical environments improve interpersonal relationships and teamwork among staff.	300	2.93	.756	Agree
	Grand Mean	**300**	**2.99**	**.756**	**Agree**

The result in Table 2 showed a grand mean of 2.99, which is above the criterion mean of 2.50. This indicates that respondents agreed that TETFund-supported physical facilities influence staff job satisfaction through mechanisms such as adequate space, comfort, sanitation, and conducive work environments. The findings imply that quality physical infrastructure contributes to improved morale, reduced stress, enhanced teamwork, and overall workplace satisfaction.

Research Question 3: To what extent does TETFund-supported technology and equipment provide job satisfaction in tertiary institutions in Nigeria?

Table 3: Mean and Standard Deviation Analysis on TETFund-Supported Technology, Equipment and Job Satisfaction

S/N	Item Descriptions	N	Mean	SD	Remark
11	TETFund-supported ICT facilities improve staff efficiency and instructional effectiveness.	300	3.04	.773	Agree
12	Availability of modern laboratory and workshop equipment enhances staff job satisfaction.	300	2.98	.752	Agree
13	Digital technologies provided through TETFund improve research and academic productivity.	300	3.06	.768	Agree
14	Access to modern teaching equipment increases lecturers' motivation and commitment to work.	300	2.94	.739	Agree
15	TETFund-supported technologies improve communication and administrative effectiveness in institutions.	300	3.00	.755	Agree
	Grand Mean	**300**	**3.00**	**.757**	**Agree**

The result in Table 3 revealed a grand mean of 3.00, indicating respondents' agreement that TETFund-supported technology and equipment significantly improve job satisfaction in tertiary institutions in Nigeria. The findings imply that ICT facilities, modern instructional equipment, digital technologies, and laboratory facilities improve instructional effectiveness, academic productivity, communication, and workplace motivation among staff.

Research Question 4: What is the impact of TETFund-supported facilities in providing a safe environment in tertiary institutions in Nigeria?

Table 4: Mean and Standard Deviation Analysis on TETFund-Supported Facilities and Safe Environment

S/N	Item Descriptions	N	Mean	SD	Remark
16	TETFund-supported buildings and facilities improve safety conditions within tertiary institutions.	300	2.97	.744	Agree
17	Modern laboratories and workshops provided through TETFund reduce risks associated with practical activities.	300	3.02	.759	Agree
18	Adequate lighting, ventilation, and sanitation provided through TETFund enhance environmental safety.	300	3.05	.771	Agree
19	Provision of safety equipment and emergency facilities improves workplace security for staff and students.	300	2.96	.748	Agree
20	TETFund-supported infrastructural maintenance promotes a healthy and accident-free learning environment.	300	3.01	.763	Agree
	Grand Mean	**300**	**3.00**	**.757**	**Agree**

The result in Table 4 revealed a grand mean of 3.00, which is above the criterion mean of 2.50, indicating that respondents agreed that TETFund-supported facilities significantly provide a safe environment in tertiary institutions in Nigeria. The findings imply that improved infrastructure, safety equipment, modern laboratories, proper sanitation, and facility maintenance contribute to safer teaching and learning environments for staff and students.

Hypothesis

H_0: There is no significant mean difference between the responses of teaching and non-teaching staff on TETFund-supported physical facilities in overall job satisfaction of staff in tertiary institutions in Nigeria.

Table 5: Independent t-test Analysis of Teaching and Non-Teaching Staff Responses on TETFund-Supported Physical Facilities and Overall Job Satisfaction

Variables	Category	N	Mean	SD	df	t-cal	p-value	Decision
TETFund-Supported Physical Facilities and Job Satisfaction	Teaching Staff	175	3.01	.74	298	1.42	.157	Not Significant
	Non-Teaching Staff	125	2.94	.71				
	Total	300	2.98	.73				

The independent t-test analysis presented in Table 5 revealed that teaching staff had a mean score of 3.01 with a standard deviation of .74, while non-teaching staff had a mean score of 2.94 with a standard deviation of .71 on the influence of TETFund-supported physical facilities on overall job satisfaction.

The calculated t-value of 1.42 with a corresponding p-value of .157 is greater than the .05 level of significance. Therefore, the null hypothesis was accepted. This indicates that there is no statistically significant mean difference between the responses of teaching and non-teaching staff regarding the influence of TETFund-supported physical facilities on overall job satisfaction in tertiary institutions in Nigeria. The finding implies that both teaching and non-teaching staff similarly perceive TETFund-supported physical facilities as important contributors to staff comfort, workplace effectiveness, and job satisfaction in tertiary institutions.

Discussion of findings

The findings of this study revealed that TETFund-supported facilities play a significant role in improving job satisfaction among staff in tertiary institutions in Nigeria. The grand mean values recorded across all the research questions were above the criterion mean of 2.50, indicating respondents' agreement that TETFund-supported facilities enhance workplace effectiveness, comfort, and institutional productivity.

The result in Table 1 revealed a grand mean of 2.98, which is above the criterion mean of 2.50, indicating that respondents agreed that TETFund-supported physical facilities significantly improve staff job satisfaction in tertiary institutions in Nigeria. The findings imply that modern office spaces, lecture halls, laboratories, libraries, and other infrastructural facilities create conducive working environments that enhance staff comfort, morale, productivity, and effectiveness. This finding is consistent with the work of Ekpoh (2018), who observed that adequate physical facilities improve staff motivation, productivity, and institutional performance in higher education institutions. Similarly, Reviana et al. (2024) reported that quality workplace environments positively influence employees' psychological well-being and job commitment. Shetty et al. (2025) also emphasized that comfortable and well-equipped physical workspaces significantly improve employee morale and professional satisfaction.

The findings further support Herzberg's Two-Factor Theory, which explains that physical working conditions are hygiene factors capable of reducing dissatisfaction and improving employees' workplace experiences. The provision of modern physical infrastructure through TETFund interventions therefore contributes to creating supportive academic and administrative environments that encourage effective teaching, research, and service delivery in tertiary institutions.

The result in Table 2 showed a grand mean of 2.99, indicating respondents' agreement that TETFund-supported physical facilities influence staff job satisfaction through mechanisms such as adequate office space, comfort, sanitation, ventilation, and conducive work environments. The findings imply that improved physical environments reduce stress, enhance teamwork, promote professional interaction, and improve overall workplace satisfaction among staff members. This finding agrees with the position of Ekpoh (2018), who noted that conducive physical work environments positively affect employees' attitudes, commitment, and institutional productivity. Likewise, Shetty et al. (2025) found that workplace comfort and environmental quality significantly improve employee engagement and organizational effectiveness.

The findings also indicate that physical facilities alone may not guarantee complete job satisfaction. In line with Herzberg's motivational theory, infrastructural facilities primarily reduce dissatisfaction, while factors such as salary, promotion opportunities, leadership support, recognition, and professional development remain important motivators for achieving sustainable job satisfaction. Thus, while TETFund-supported facilities improve workplace conditions, tertiary institutions must complement infrastructural development with effective welfare policies and staff development programmes.

The result in Table 3 revealed a grand mean of 3.00, indicating respondents' agreement that TETFund-supported technology and equipment significantly improve job satisfaction in tertiary institutions in Nigeria. The findings suggest that the provision of ICT facilities, modern instructional technologies, laboratory equipment, internet connectivity, and digital learning tools improves instructional effectiveness, communication, academic productivity, and workplace motivation among staff. This finding corroborates Adeola and Musa (2023), who observed that digital technologies and modern instructional equipment enhance teaching effectiveness, research productivity, and institutional efficiency in Nigerian tertiary institutions.

Similarly, OECD (2020) emphasized that technology integration in educational institutions improves professional competence, organizational productivity, and workforce performance. The availability of modern technologies and equipment enables lecturers and non-teaching staff to perform their duties more efficiently, reduces workplace stress, and promotes innovation in teaching, research, and administration. Consequently, TETFund-supported technology interventions contribute significantly to institutional modernization and staff satisfaction.

The result in Table 4 revealed a grand mean of 3.00, which is above the criterion mean of 2.50, indicating respondents' agreement that TETFund-supported facilities significantly provide safe environments in tertiary institutions in Nigeria. The findings imply that improved buildings, safety equipment, laboratory facilities, sanitation systems, and maintenance culture contribute to safer teaching and learning environments for staff and students. This finding aligns with Shetty et al. (2025), who reported that safe workplace environments positively influence employee confidence, psychological well-being, and job performance.

The provision of safe and conducive working environments is particularly important in tertiary institutions where teaching, research, and laboratory activities involve the use of technical equipment and facilities. Improved safety infrastructure reduces workplace

hazards, enhances staff confidence, and promotes effective institutional operations. Therefore, TETFund interventions in safety-related facilities contribute significantly to staff welfare and organizational effectiveness.

The independent t-test analysis presented in Table 5 revealed that teaching staff had a mean score of 3.01 with a standard deviation of .74, while non-teaching staff had a mean score of 2.94 with a standard deviation of .71 regarding the influence of TETFund-supported physical facilities on overall job satisfaction. The calculated t-value of 1.42 with a corresponding p-value of .157, which is greater than the .05 level of significance, indicates that there is no statistically significant mean difference between the responses of teaching and non-teaching staff. The implication of this finding is that both teaching and non-teaching staff similarly perceive TETFund-supported facilities as important contributors to workplace comfort, effectiveness, and job satisfaction. This suggests that infrastructural development benefits all categories of staff within tertiary institutions irrespective of job roles. The finding further demonstrates the broad impact of TETFund interventions on institutional development and staff welfare in Nigerian tertiary institutions.

In summary, while TETFund interventions are vital for enhancing staff welfare and institutional performance, achieving sustainable job satisfaction requires a holistic approach that combines infrastructural improvements with effective leadership, equitable remuneration, and comprehensive welfare policies for staff.

Limitations and Directions for Future Research

The intention of this work was to be carried out in the entire country of Nigeria but for paucity of funds and uncompromising attitude of staff who could not border to complete and return the questionnaire. The work did not effectively measure the durability of satisfaction effects over time (post occupancy longitudinal designs) or explore distributional impacts across campuses and demographic groups. These limitations can warrant further research and there should be outlines for rigorous mixed methodology for future studies.

Recommendations

1.Government should develop stronger policy and managerial implications for more funding of tertiary institutions.

2.Regulatorsand institutional leaders should effectively own, maintain these facilities provided by TETFund for durability.

3.Since job satisfaction can be attained through effective facilities, there is need stakeholders and agencies to look inward to facilitate regular maintenance.

4. TETFund should refocus on security projects with the intention of protecting the already provided facilities.

Conclusion

Physical facilities are foundational to the daily experience of staff in Nigerian tertiary institutions. TETFund's investments, when well selected, executed, and maintained, can significantly enhance job satisfaction by improving comfort, safety, task enablement, and institutional pride. Yet facilities alone do not guarantee satisfaction: effects are contingent on utilities reliability, maintenance culture, and alignment with users' work.

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