

# **EMPIRICAL NARRATIVES ON WORKPLACE ENVIRONMENT AND EMPLOYEES' PERFORMANCE NEXUS: NEW EVIDENCE FROM THE KNOWLEDGE INDUSTRY**

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## **Abstract**

This study examined workplace environment and its impact on employees' performance in the knowledge industry. Specifically, it investigated the mixed evidence on the impact of physical, psychosocial, and work-life balance as dimensions of workplace environment on task performance, contextual performance, and counterproductive work behavior as dimensions of employees' performance. The descriptive research design using a cross-sectional survey was adopted. Data were elicited from the academic and non-academic staff in five selected tertiary institutions (one federal university, one state university, one private university, one polytechnic, and one college of education) in Delta State, Nigeria. The population of employees in the five institutions is 4,302 and a sample size of 500 employees was taken using the framework of Owojori (2002). The instrument for data collection is the questionnaire. The data retrieved from the respondents were analyzed using the mean statistic while linear regression was used to test the hypotheses to find out the impact of the independent variables on the dependent variable. Results showed that the three dimensions of workplace environment examined had positive and significant influence on employees' performance. Based on the findings, the study recommended that tertiary institutions' management should give adequate attention to creating a better workplace environment for employees and setting up unit committees to see that this objective is achieved.

**Keywords:** Contextual performance, Counter-productive work behavior, Work adjustment theory, Work-life balance, Work role empowerment

**JEL Classification:** I23, M12, O15

## 1. INTRODUCTION

Knowledge industries generate revenues from the production of knowledge rather than use knowledge as input as it is with other industries. Typical industries in this category are education, health, communication, consulting, and information technology. The knowledge industry has encouraged modern capitalism. The industry creates needs, which is a distinctive characteristic of a modern economy (Hisham, 2012). The term knowledge industry is credited to Fritz Machlup, an Austrian-American economist to compliment the concept of knowledge economy. Interestingly, since the emergence of the concept, studies on the effect it has on the economy have been undertaken. To permit empirical investigation, studies have split up the industry into different categories using different attributes. The most common attribute is the categories of employees with university degrees. This basis of classification emphasizes education as one industry in the knowledge industries. This study, in line with some prior studies, thus examines educational institutions' workplace environment and the performance of employees.

Education is a concept that is multifaceted. It is a process in that it is a set of activities. It is also a product as measured by the qualities and traits displayed by the acquirers. Also, it is a discipline because it is an organized knowledge to which individuals are exposed to (Aigbedion, Iyakwari, & Gyang, 2017). According to Adetula, Adesina, Owolabi, and Ojeka (2017), education is the mode through which social and physical abilities acquired for societal development. Education provides human capital and technological knowhow for economic transformation or industrialization of the society. In this connection, education is an investment. Aigbedion et al (2017) reported a positive impact of education sector on economic growth in Nigeria. The study however added that education expenditures have not been effectively utilized

The essence of education industry in a growing economy is not debatable. The industry helps to advance a nation's economic growth and global competitiveness through the provision of accessible, relevant, and high-quality education (Federal Ministry of Education, 2019). To fulfill this essence, they ought to have good physical layouts and infrastructure, the right programmes and policies put in place and knowledgeable personnel. This implies that breeding a qualified workforce and creating a conducive work environment that promotes employees' well-being, would lead to the accomplishment of institutional goals.

A congenial work environment has been singled out as one of the vital factors that can enable the knowledge industry to contribute maximally to national development. Scholars have made several attempts to conceptualize the workplace environment. However, it is defined by Tripathi (2014) as the environment in which people work that includes physical setting, job profile, culture, and market condition. In the same vein, Ruchi and Surinder (2014) described workplace environment as consisting of: physical scenery (e.g. noise, equipment);

fundamentals of the job itself (e.g. workload, task); extensive institutional features (e.g. culture, history); and even extra institutional background (e.g. work setting, employee relation). Kasule (2015) is of the opinion that workplace environment can be perceived as those processes, systems, structures, tools, or conditions in the workplace that influence favorably or unfavorably individual employee performance.

As Chandrasekhar (2011) puts it, the type of workplace environment in which employees operate could go a long way in determining whether or not such organization will prosper. This connotes also that the quality of workplace environment mostly impacts on the level of employees' motivation and their overall performance. This could be evident in their work engagement levels, error rate, level of innovation, interactions with colleagues, absenteeism, and their retention rate (Ollukkaran & Gunaseelan, 2012). On this note, Kiruja and Karanja (2013) suggested that education industry should give unwavering attention to employees' well-being to achieve their goals, mission, and vision.

In modern-day tertiary institutions, the performance of both the academic and non-academic staff has become a central issue that has stimulated interest among scholars and researchers. Performance is a core construct in the 21<sup>st</sup> century organization. Platt and Sobotka (2010) portrayed performance to mean the combined result of effort, ability, and perception of an employee towards his/her tasks. It is a paramount consideration if an institution is to realize its vision and mission. Several factors serve as determinants of employee performance at the workplace and the workplace environment tops the list. This was confirmed by Sabir, Iqbal, Rehman, Shah, and Yameen (2012) when they opined that the workplace environment is tied to the attainment of organizational objectives and plays a multi-character role geared towards this purpose (Gitahi, Waiganjo, & Koima, 2015; Kasule, 2015; Vischer, 2008).

In Nigerian, tertiary institutions, in collaboration with education agencies like the Tertiary Education Trust Fund (TETFUND), have made considerable investments to design and build physical infrastructures that are extremely important in maximizing individual employee performance. In addition, the non-physical aspects of a workplace such as the psychosocial factors are another major consideration in the attempt to spur high performance. Many institutions have introduced certain policies and programmes among their employees that address work-life balance, health, fitness and so on (Chandrasekar, 2011).

Despite these efforts by the Nigerian tertiary institutions, there is still a disproportion between workplace environment factors and employees' abilities and outputs, prompting different reactions. Based on preliminary observations, this study noticed that most tertiary institutions tie employees' performance to skill acquisition and know-how whereas researches have shown that about 86% of performance problems can be attributed to the workplace environment of organizations (Taiwo, 2010). Also, some other studies that have looked at this

phenomenon in the education sector have pinned their attention to overall institutional performance with little or no focus on the workplace environment, especially from the employees' perspective (Global Workforce Study, 2012). Is this situation the same with that of tertiary institutions in Delta State, Nigeria? What is the influence of workplace environment on the performance of employees in tertiary institutions in Delta State? These issues informed this study.

Against this backdrop, the specific objectives of this study are to: (i) determine whether physical workplace factors have any significant impact on employees' performance in tertiary institutions; (ii) ascertain the extent to which psychosocial workplace factors influence employees' performance in tertiary institutions; and to (iii) examine the influence of work-life balance on employees' performance in tertiary institutions.

To permit empirical investigation of the subject matter of this study, the following null hypotheses have been raised: (i) Physical workplace factors have no statistically significant impact on employees' performance. (ii) Psychosocial workplace factors do not significantly influence employees' performance. (iii) Work-life balance has no statistically significant impact on employees' performance.

## **2. REVIEW OF RELATED LITERATURE**

### **2.1 WORKPLACE ENVIRONMENT**

Scholars have made several attempts to conceptualize the term 'workplace environment' in different contexts and perspectives. For instance, Taiwo (2010) defined it as the sum of the interrelationships that exist within the employees and between the employees and the environment in which the employees work. Bushiri (2014) viewed it as an entirety which comprises the totality of forces, actions and other influential factors that are currently and, or potentially contending with the employee's activities and performance at the workplace. These definitions therefore imply that the workplace environment can be ascribed to anything or anyone around the employee that can either make or mar the employee's work progress and outcomes. And as pointed out by Oludeyi (2015), the workplace environment consists of three components which include the technical, the human and the organizational environment.

Shedding light on these components, Yusuf and Metiboba (2012) described the technical environment to include the tools, technological infrastructure and other mechanical elements that are present at the workplace for use by employees. They added that the human environment consists of the employees' colleagues, their teams and workgroups, issues on workplace interaction, leadership matters, among others; while the organizational environment depicts the policies, systems, procedures, organizational values and culture, which are controlled by the management.

Some studies have grouped the workplace environment into conducive and toxic environments (Taiwo, 2010; Chaddha, Ravi & Noida, 2011; Yusuf & Metiboba, 2012; Assaf & Alswalha, 2013). In their views, the conducive workplace environment gives pleasurable experiences to employees and helps them actualize in the dimension of personality profile while the toxic workplace environments give painful experiences and de-actualize employees' behavior. Kyko (2005) maintained that irresponsible employees can change to be responsible and be more committed to their jobs in a conducive work environment because such environments reinforce their self-actualizing traits. However, the reverse is the case in a toxic work environment.

From a different perspective, Gitahi, Waiganjo and Koima (2015) was of the opinion that the workplace environment comprises of three main factors namely: the physical workplace factors, the psychosocial workplace factors and the work-life balance practiced at the workplace. They noted that every aspect of a workplace environment reflects these three factors. According to them, the physical workplace factors concern the office layout, designs, and structures, while the psychosocial factors have to do with the working conditions, role congruity and social support from management. The concept of work-life balance is a combination of interactions among the different areas of an employee's life to strike a balance that affects their roles at the workplace.

### **2.1.1. PHYSICAL WORKPLACE ENVIRONMENTAL FACTORS**

The features of the physical workplace environment, according to Badayai (2012) can be classified to include five main factors namely: the air factor, the sound factor, the space factor, the temperature factor, and the light and color factor. These features, according to Temessek (2009) determine the aesthetic, décor and design aspects of the workplace environment, which eventually assist in making an employee's work experience better and compel improved work outcomes (Gitahi, Waiganjo & Koima, 2015; Kasule, 2015).

### **2.1.2. PSYCHOSOCIAL WORKPLACE ENVIRONMENTAL FACTORS**

Psychosocial workplace environment concerns how an employee feels, experiences, and responds to his or her work surroundings. It is a collective term used to describe the interaction between employees in a workplace, the employees' job and its effect on the employees, working conditions and the organizational culture (The Health, Safety & Environment [HSE] Gateway, 2020). Early literature revealed that psychosocial work environment consists of concepts such as balance between efforts and rewards (Siegrist, 1996), organizational justice (Elovainio, Kivimäki & Vahtera, 2002), workplace social capital (Kouvonen, Kivimäki, Vahtera, Oksanen, Elovainio & Cox, 2006) and workplace bullying (Einarsen & Skogstad, 1996).

In more recent times, psychosocial workplace factors include but are not limited to other aspects of the job and work environment such as organizational climate or culture, work roles, interpersonal relationships at work, and the design and content of tasks (e.g. variety, meaning, scope, repetitiveness, etc.). The concept of psychosocial factors extends also to the extra-organizational environment (e.g. domestic demands) and aspects of the individual (e.g. personality and attitudes), which may influence the development of stress at work (Rugulies, 2019). Gitahi, Waiganjo and Koima (2015) added role congruity, workplace support and leadership styles as part of the psychosocial workplace environment that may independently and or jointly determine the employees' performance at the workplace.

### **2.1.3. WORK-LIFE BALANCE**

This can be described as maintaining equilibrium between the workplace environmental factors and the personal affairs (e.g. family issues) of an employee. Besides the environmental issues (internal work factors) that influence the performance of an employee at the workplace, the personal issues (external factors) encountered outside their work life play a crucial role on his/her attitudes and behaviors at the workplace. As defined by Smith (2010), work-life balance connotes the art of an employee fulfilling a work requirement and at the same time, ensuring that other personal matters (e.g. hobbies, family, etc.) do not suffer.

The inability of an employee to maintain this balance would have short- and long-term consequences on job outcomes. Such consequences could be manifested through unnecessary delays in meeting work targets, being distracted from work tasks at hand, abandoning the workplace for personal matters, and so on.

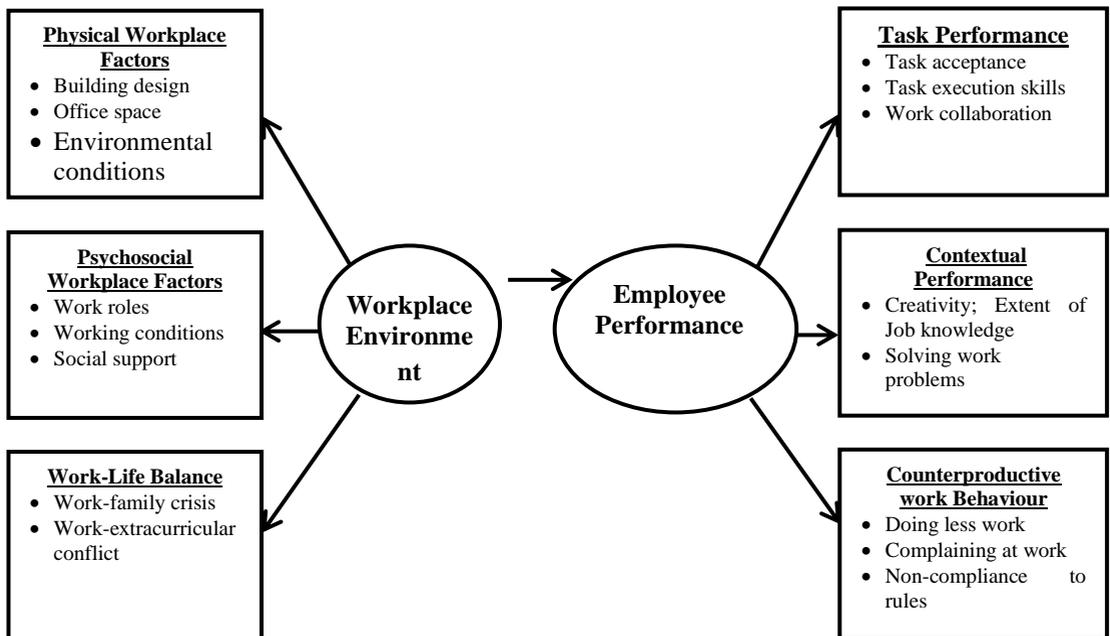
## **2.2. EMPLOYEE PERFORMANCE**

To gain an understanding of an employee's contribution towards the attainment of institutional goals and objectives, the concept of performance becomes paramount. Karakas (2010) described employee performance to mean an employee's work accomplishment after maximum efforts have been exerted towards it which comes through engaged profile, considerate co-employees, and employers, among others. As emphasized by Pradhan and Jena (2017), performance aspects that concern employees can be partitioned into three namely: their task performance, adaptive performance, and contextual performance. Task performance refers to the overt behaviors on work tasks displayed by an employee on the job (Conway, 1999); adaptive performance reveals an employee's skill to adjust and provide adequate support to their job profile at the workplace (Hesketh & Neal, 1999) while contextual performance depicts pro-social behavior shown by employee in a work-setting not necessarily addressed in his or her job role (Pradhan & Jena, 2017).

In the field of human resources management, different constructs have been used to measure employee performance at the workplace. Some of these constructs include: behavior towards customers, teamwork, work role empowerment (Kennedy, Lassk & Burns, 2001); organizational support and initiatives (Borman, Buck, Hanson, Motowidlo, Stark & Drasgow, 2001); opportunity for reward, observed effort, satisfaction (McCook, 2002); contextual and job performance (Johnson, 2003); proactive work behavior, problem-solving, idea implementation (Parker, Williams & Turner, 2006); disciplined effort, work outcomes (Schepers, 2011); level of creativity, training efforts, handling work-related stress (Audrey & Patrice, 2012); and task, contextual and counterproductive work behaviour (Koopmans, Berhnaards, Hildebrandt, Vet & Berk, 2014).

### 2.3 CONCEPTUAL MODEL OF THE STUDY

The conceptual model explains the relationship between the dependent variable (employees' performance) and the independent variables (workplace environment) of the study. The independent variables are the physical workplace factors, psychosocial workplace factors and work-life balance factors. It is illustrated that workplace environmental factors are assumed to influence the performance of employees in tertiary institutions in Delta State.



*Source: Researchers' Conceptualization of Workplace Environment and Employees' Performance.*

## 2.4 EMPIRICAL REVIEW ON WORKPLACE ENVIRONMENT AND EMPLOYEES' PERFORMANCE

This section presents some prior studies on the influence workplace environment has on employees' performance. Taiwo (2010) investigated whether work environment has any influence on workers' productivity in four Oil and Gas firms in Nigeria - Texaco Plc., Agip Plc., Oando Plc., and Total Plc. Using primary data obtained from 61 respondents which were analyzed using frequency distribution and t-test, the study revealed that both internal and external work environmental factors are variables that influence productivity among employees.

Kasule (2015) examined the impact of work environment on academic staff job performance in Ugandan public universities, using Kyambogo University as a case study. Different significant work environmental factors that are relevant to job performance were highlighted. Two hundred and ninety-four (294) academic staff were sampled for the study. The data collected were analyzed using descriptive statistics and Pearson Product Moment Correlation Coefficient. The results revealed that the prevailing work environment of the university significantly affects the job performance of the academic staff; although the factors exist at a low level in the institution.

Gitahi, Waiganjo and Koima (2015) focused on the effect of workplace environment on bank employees' performance in Nakuru Town, Kenya. The workplace environment was measured using the psychosocial, physical, and work-life balance factors. One hundred and seventy-three (173) non-managerial employees formed the sample and questionnaire was administered to elicit data from the respondents. The data were analyzed using the descriptive statistics and multiple regression models. Findings from the analysis revealed that physical features of the workplace environment have no significant impact on the performance of the employees while that of the psychosocial and work-life balance factors had significant impact.

In the apparel and textile industry, Lankeshwara (2016) examined the impact of workplace environment on employees' performance, using the Brandix Intimate Apparel – Awissawella. The study used primary data derived from questionnaire administered on 85 employees (both managerial and non-managerial positions). The results of the multiple regression showed physical work environment, job aids, and supervisory support as positive influencers of employees' performance with job aid was as the major influencer.

In the transportation industry, Duru and Shimawua (2017) investigated the effect of work environment on employee productivity at the Edo City Transport Service, Benin City. Both primary and secondary data were used for the study. The primary data involved the use of questionnaire while the secondary data were tied to the reviewed literature. Thirty-five (35) respondents were sampled for the study. The data generated were analyzed using simple percentage. The findings showed that a good working environment is favorable for optimal performance among the

employees. This performance manifests in the form of a sense of belongings, reduced absenteeism, feel inspired to work more, and portray better emotions towards tasks at their workplace.

Al-Omari and Okasheh (2017) in their investigation on the influence of work environment on job performance using an engineering company sampled 85 employees. They made use of the quantitative methodology indicating a cross-sectional survey. The study measured work environmental factors using noise, space, light and color, air, and employees' satisfaction. The data collected via the survey from the sampled employees showed that workplace environmental factors such as ventilation and light, noise, among others constitute the major conditions that negatively affect job performance of the employees.

Similarly, Putri, Ekowati, Supriyanto and Mukaffi (2019) investigated the effect of work environment on employee performance through work discipline. The study sampled 208 employees from PT. Gatra Mapan, Indonesia. Questionnaire was used to collect data from the employees and analyzed using the path analysis. The study found that work discipline can serve as a mediating influence between the workplace environment and employees' performance. It was also discovered that work environment itself also influences the employees' performance and discipline at the workplace.

## **2.5 THEORETICAL FRAMEWORK**

Different theories that address the relationship between workplace environment and workers' performance have been postulated by several scholars. For the purpose of this study, Dawes and Lofquist's (1984) Theory of Work Adjustment (TWA) was adopted to possibly explain the relationship between individuals and their workplace environment. Work is perceived as an interaction between a person and a work environment. The work environment requires the execution of certain tasks at the workplace and this implies the person having the required competencies to execute them.

As an exchange relationship (between the person and the environment), the person looks forward to some means of remunerations for performing on the job and anticipates certain working conditions such as a favorable workplace. To maintain a balance between anticipated needs and the work requirements, both parties must continually fulfill each other's certain requirements (Dawes & Lofquist, 1984). The extent to which the requirements of both parties are met is referred to as "correspondence". Thus, TWA is also known as Person-Environment Correspondence Theory (Oludeyi, 2015).

This theory proves that the more an organization meets the requirements and conditions needed by an employee towards his/her tasks (e.g. a favorable working environment), the more he/she will excel in the work duties. As such, maintaining a correspondence would bring about a solution where everyone benefits for both the employees and the organization. It is therefore the assumption

of this study that creating a workplace environment with comfortable physical infrastructure, good psychosocial factors and a favorable work-life balance factors in tertiary institutions would lead to a corresponding increase in the performance of both the academic and non-academic employees reflected in improved task results, better contextual outputs and reduced counterproductive work behavioral practices.

### **3. RESEARCH METHODS AND PROCEDURES**

This study adopted a cross-sectional survey method because it is considered suitable for gaining insights about phenomena, situations, or problems (Kumar, 2011; Creswell, 2013). From the population of all academic and non-academic staff of all public and private tertiary institutions in Delta State, the study selected the academic and non-academic staff of one federal university, one state and one private university, one polytechnic and one college of education to constitute the study's sample. The study applied a benchmark of ten percent (10%) of the population as suggested by Owojori (2002) to select the sample units. This brings the total sample size to 500 staff.

The instrument used for this study is the questionnaire titled "Workplace Environment and Employees' Performance Questionnaire (WEEPQ)". To evaluate the employees' performance, the Individual Work Performance Scale (IWPS) developed by Koopmans, Bernaards, Hildebrandt, Buuren, Van der Beek and De Vet (2014) was adapted. It is a 19-items questionnaire designed to measure three dimensional aspects of an employee performance at the workplace: task performance, contextual performance, and counter-productive work behaviour. The items are measured on a 5-point Likert scale of 5 for strongly agree to 1 for strongly disagree except for counter-productive work behaviour measured on 4-point scale of 1 for never and 4 for often.

To ensure the reliability of the instrument, the Cronbach Alpha method of reliability was used to determine the consistency of the opinion of the respondents. The workplace environment consists of 15 items and its Cronbach's (alpha) value is 0.986 while the employee performance which contains 19 items has a Cronbach's (alpha) value of 0.985. Thus, the results of the analysis indicated that the instrument is reliable since the values are greater than 0.70 suggested by Hair, Ringle and Sarstedt (2011).

#### **3.1 METHOD OF DATA ANALYSIS**

The data collected from the respondents were analyzed using descriptive and inferential statistics. Simple percentage and frequencies were used to analyze the demographic data of the respondents, while mean was used to analyze the questionnaire items. However, linear regression was used to test the hypotheses to find out the effect of the independent variables on the dependent variable. The rationale for using regression is that it predicts the value of a variable based on the

value of another variable (Pallant, 2005). The alpha level of significance for testing the hypotheses is 5%. The formulated models are:

$$EPERF = \beta_0 + \beta_1PHYEN + \varepsilon_i \tag{1}$$

$$EPERF = \beta_0 + \beta_1PSYEN + \varepsilon_i \tag{2}$$

$$EPERF = \beta_0 + \beta_1WORLB + \varepsilon_i \tag{3}$$

Where:

EPERF = Employee performance (dependent variable)

PHYEN = Physical workplace environment factors (independent variable)

PSYEN = Psychosocial workplace environment factors (independent variable)

WORLB = Work-life balance factors (independent variable)

$\beta_0, \beta_1$  = Parameters

$\varepsilon_i$  = Error term

#### 4. PRESENTATION OF RESULTS AND DISCUSSION

A total of 500 copies of the structured questionnaire were administered but only 384 were retrieved without errors and considered usable for further data analysis indicating a 77% response rate. This response rate is enough because Oghuvbu (2010) noted that 60% and above response rate is statistically convenient for further analysis and can be reliably used.

##### 4.1 ANALYSIS OF QUESTIONNAIRE DATA

The data retrieved from the respondents concerning the subject matter are presented in Tables 1 and 2. The criterion mean for accepting an item as significant is 3.00.

*Table 1: Descriptive Statistics on Workplace Environment*

| S/N | Workplace Environment                                   | N   | Mean | Remarks                |
|-----|---|-----|------|------------------------|
|     | Physical Environmental Factors                          |     |      |                        |
| 1   | The aesthetic features of my office are appealing       | 384 | 3.61 | <b>Significant</b>     |
| 2   | My office is well spacious for my work tasks            | 384 | 3.20 | <b>Significant</b>     |
| 3   | My office is very ventilated                            | 384 | 3.34 | <b>Significant</b>     |
| 4   | The lighting condition of my office space is adequate   | 384 | 3.21 | <b>Significant</b>     |
| 5   | The design of my office building reflects comfort       | 384 | 3.92 | <b>Significant</b>     |
|     | <b>Psychosocial Environmental Factors</b>               |     |      |                        |
| 1   | The content of my job tasks is moderate                 | 384 | 2.35 | <b>Not Significant</b> |
| 2   | There are good interpersonal relationships in my office | 384 | 3.68 | <b>Significant</b>     |
| 3   | My office working conditions are reasonable             | 384 | 2.94 | <b>Not Significant</b> |

|                                  |   |     |      |                        |
|----------------------------------|---|-----|------|------------------------|
| 4                                | I receive adequate social support from my office      | 384 | 4.15 | <b>Significant</b>     |
| 5                                | The work culture in my office is sensible             | 384 | 2.35 | <b>Not Significant</b> |
| <b>Work-Life Balance Factors</b> |   |     |      |                        |
| 1                                | My work gives me time to attend to family needs       | 384 | 2.32 | <b>Not Significant</b> |
| 2                                | I still engage in my hobbies even after work          | 384 | 2.23 | <b>Not Significant</b> |
| 3                                | I get annual leave from office                        | 384 | 3.42 | <b>Significant</b>     |
| 4                                | My office grants me time for my personal matters      | 384 | 2.53 | <b>Not Significant</b> |
| 5                                | Extracurricular activities are organized by my office | 384 | 1.84 | <b>Not Significant</b> |

*Source: Authors' Field Data (2021)*

Table 1 shows the responses concerning items raised on workplace environment. The remarks for all items with regards to the staff's physical environment are all significant indicating a positive response. However, for the psychosocial workplace factors, the respondents are negative towards items 1, 3 and 5. And for work-life balance factors, only item 3 was considered significant by the respondents. This analysis therefore means that the respondents are pleased with their physical environment but are not too pleased with their psychosocial environment and their work-life balance.

**Table 2: Descriptive Statistics on Employees' Performance**

| S/N                           | Employees' Performance  |     |      |         |
|-------------------------------|---|-----|------|---------|
|                               | Task Performance  | N   | Mean | Remarks |
| 1                             | I manage to plan my work so that it was done on time            | 384 | 4.26 | High    |
| 2                             | My planning was optimal.  | 384 | 4.66 | High    |
| 3                             | I kept in mind the results that I had to achieve in my work     | 384 | 4.23 | High    |
| 4                             | I was able to separate main issues from side issues at work     | 384 | 4.15 | High    |
| 5                             | I knew how to set the right work priorities                     | 384 | 4.51 | High    |
| 6                             | I was able to perform my work well with minimal time and effort | 384 | 4.22 | High    |
| 7                             | Collaboration with others was very productive                   | 384 | 4.28 | High    |
| <b>Contextual Performance</b> |   |     |      |         |
| 1                             | I started new tasks myself when my old ones were finished       | 384 | 3.92 | High    |
| 2                             | I took on challenging work tasks, when available                | 384 | 3.80 | High    |
| 3                             | I worked at keeping my job knowledge and skills up to date      | 384 | 3.55 | High    |
| 4                             | I came up with creative solutions to new problems               | 384 | 3.80 | High    |
| 5                             | I did more than was expected of me                              | 384 | 4.12 | High    |
| 6                             | I actively looked for ways to improve my work performance       | 384 | 3.42 | High    |
| 7                             | I knew how to solve difficult situations and setbacks quickly   | 384 | 3.45 | High    |

| <b>Counterproductive Work Behavior</b> |   |     |      |     |
|--|---|-----|------|-----|
| 1                                      | I complained about unimportant matters at work            | 384 | 1.87 | Low |
| 2                                      | I made problems greater than they were at work            | 384 | 1.16 | Low |
| 3                                      | I focused on the negative aspects of a work situation     | 384 | 1.09 | Low |
| 4                                      | I did less than was expected of me                        | 384 | 1.34 | Low |
| 5                                      | I sometimes did nothing, while I should have been working | 384 | 1.02 | Low |

*Source: Authors' Field Data (2021)*

The performance ratings for the employees are presented in Table 2. It is obvious that the employees' ratings are high as they opined to have done well in both on the job tasks and contextually. The results also showed an impressive rating with regards to their counterproductive work behaviors as it is recorded low. This analysis implies thus, that their employees' performance is recorded high.

## 4.2 TESTING THE HYPOTHESES

### Hypothesis One

This hypothesis is tested using model1 and the result is presented in Table 3.

**Table 3:** *Linear Regression Result of Physical Workplace Environment Factors and Employees' Performance*

|               | <b>R<sup>2</sup></b> | <b>F</b>           | <b>β<sub>0</sub></b> | <b>β<sub>1</sub></b> | <b>t</b> | <b>Prob</b> |
|---------------|----------------------|--------------------|----------------------|----------------------|----------|-------------|
| PHYEN → EPERF | 0.83                 | F(1, 382) = 1860.4 | 1.49                 | 0.91                 | 43.13    | <0.05       |

*Source: Authors' Output*

Table 3 shows the coefficient of determination, R<sup>2</sup>, to be 0.83. This means that physical workplace environment explains a significant 83% variation in employees' performance. The F-statistics which is a measure of the model fitness has a value of 1860.4 and probability value that is less than 0.05. This means that the model is well fitted. The coefficient of the explanatory variable (β<sub>1</sub>) is 0.91. This value is positive implying that physical workplace environment positively influences employee performance. To ascertain the statistical significance of this positive influence, the t-statistics is computed, and it has a value of 43.13, with a probability value that is less than 0.05. Implicitly, the estimate is statistically significant. Based on this, the null hypothesis is rejected. Therefore, physical workplace environment has a significant impact on employees' performance.

### Hypothesis Two

Model 2 is used to test this hypothesis and the result presented in Table 4.

**Table 4:** Linear Regression Result of Psychosocial Environment Factors and Employees' Performance

|       |         | <b>R<sup>2</sup></b> | <b>F</b>           | <b>β<sub>0</sub></b> | <b>β<sub>1</sub></b> | <b>t</b> | <b>Prob</b> |
|-------|---------|----------------------|--------------------|----------------------|----------------------|----------|-------------|
| PSYEN | → EPERF | 0.91                 | F(1, 382) = 3704.6 | 1.62                 | 0.95                 | 60.87    | <0.05       |

*Source: Authors' Output*

The result in Table 4 shows that the R<sup>2</sup> is 0.91 and it is symptomatic of psychosocial workplace environment explaining 91% variation in employees' performance. Again, the model fitness is sustained as the probability value of the F-statistics is less than 0.05. The parameter of the explanatory variable (β<sub>1</sub>) is 0.95. This is positive showing that psychosocial workplace environment has positive influence on employees' performance. The t-statistics for the measurement of the significance of the parameter is 60.87 and it is significant because the probability value is less than 0.05. With these results, the null hypothesis cannot be accepted. Thus, psychosocial workplace environment has significant positive influence on employees' performance.

### Hypothesis Three

Results of model 3 used for testing this hypothesis is presented in Table 5.

**Table 5:** Linear Regression Result of Work-Life Balance Factors and Employees' Performance

|       |         | <b>R<sup>2</sup></b> | <b>F</b>           | <b>β<sub>0</sub></b> | <b>β<sub>1</sub></b> | <b>t</b> | <b>Prob</b> |
|-------|---------|----------------------|--------------------|----------------------|----------------------|----------|-------------|
| WORLB | → EPERF | 0.94                 | F(1, 382) = 5673.6 | 1.56                 | .97                  | 75.32    | <0.05       |

*Source: Authors' Output*

The results in Table 5 revealed that the explained variation in employees' performance arising from work-life balance factors measured by R<sup>2</sup> is 0.94, that is, 94%. This means that a very large proportion of the changes in employee performance can be explained by work-life balance factors. The F-value (5673.6) has a probability value of less than 0.05 which confirms the model fitness. The coefficient of the explanatory variable is 0.97 (positive) and its statistical significance determined by the t-value shows it is highly significant (t = 75.32, Prob < 0.05). Accordingly, work-life balance factors positively and significantly influence employees' performance suggesting that the null hypothesis is not sustained. Clearly, an increase in the practice of work-life balance would lead to a corresponding increase in employees' performance in tertiary institutions.

### 4.3 DISCUSSION OF THE FINDINGS

This study has examined the impact of workplace environment (physical, psychosocial, and work-life balance) on employees' performance in tertiary institutions. Concerning the hypotheses formulated to guide the study, the result of

the first hypothesis showed that physical workplace environment has a significant positive impact on employees' performance. This implies that the better the physical workplace environment, the better the performance of the employees would be. This finding is not consistent with Gitahi et al (2015). However, the finding supports Lankeshwara (2016).

The result of the second hypothesis showed that psychosocial workplace factors significantly influence employees' performance. This implies that setting up a good psychosocial workplace environment would significantly boost employees' performance. This finding corroborates the observation made by Duru and Shimawua (2017) who noted that the use of a well-designed psychosocial environment such as a favorable working condition is necessary if the employees are to exhibit positive and vibrant behaviors towards their work tasks that will yield progress in the organization since they would be encouraged to work.

Similarly, the result of the third hypothesis revealed that work-life balance factors have a significant effect on employees' performance in tertiary institutions. This denotes that an increase in the practice of work-life balance among employees would lead to a corresponding increase in their performances consistent with Gitahi et al (2015). This is not unconnected with the fact that a balance in the work-life of employees would help them to feel a sense of fulfilment both in their jobs and in their personal lives. This agrees with the statement of Smith (2010) that organizations that help employees strike a balance between their lives on the job and off the job would have both short and long term positive consequences on their job outcomes and in turn, their overall performances would be improved.

## 5. CONCLUSION AND RECOMMENDATIONS

Based on the study's findings, conclusion can be drawn that the physical workplace environment has a significant positive effect on employees' performance meaning that the better the physical environment of a tertiary institution, the better the employees' performance would be. The study also concluded that setting up a good psychosocial workplace environment would significantly boost employees' performance; and that an increase in an institution's practice on work-life balance among its employees would lead to a corresponding increase in their overall performance. This study contributes to knowledge as it brings to light the significant influence of physical work-environment, psychosocial work-environment, and work-life balance in enhancing employees' performance in Nigerian tertiary institutions.

In the light of the findings, this study recommends the following. (i) Management should give adequate attention to creating a better workplace environment for its employees. Unit committees should be set up to see that this objective is achieved. (ii) Tertiary institutions should introduce more work-life

benefit programs and policies to raise the employees' confidence that management is interested in the fulfilment of their needs.

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