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ADMINISTRATIVE STAFF RATING OF THE ADEQUACY OF PHYSICAL WORK ENVIRONMENT OF TERTIARY INSTITUTIONS IN YOBE STATE

Chika Madu Ile
Department of Technology and vocational Education, Nnamdi Azikiwe University, Awka.

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Anioke, Peggy Onyefuruchi

Office Technology and Management Department, The Federal Polytechnic, Damaturu.

Abstract

This study determined the administrative staff rating of the adequacy of physical work environment in tertiary institutions in Yobe State. Two research questions guided the study and two null hypotheses were tested at 0.05 level of significance. The design of the study was descriptive survey. Population of the study was 1,032 administrative staff of federal and state tertiary institutions in the study area. A proportionate sampling was used to select a sample size of 310 administrative staff. A structured questionnaire containing 16 items validated by three experts was used for data collection. Cronbach alpha method was used to establish the internal consistency of the instrument. Correlation coefficients of 0.83 and 0.81 for two clusters (B1 and B2) with an overall coefficient of 0.82 obtained. Mean and standard deviation were used to answer the research questions and to determine the homogeneity of the respondents' ratings while the t-test was used to test the hypotheses. The analysis was carried out using SPSS version 23.0. Findings revealed that administrative staff of rated safety measures and noise proof facilities provided in the administrative offices of tertiary institutions in Yobe State lowly adequate. The findings also showed that ownership of tertiary institution was a significant factor on the mean ratings of administrative staff on the adequacy of safety measures and noise proof facilities provided in the administrative offices. Based on the findings, the researchers concluded that there is need to improve the physical work environment of tertiary institutions in Yobe State, Nigeria. It was recommended among others that, the federal and state governments should increase the funding of tertiary institutions to improve safety measures and noise proof facilities in the institutions. This will enable the administrative staff of tertiary institutions to carry out their job tasks effectively

Key Words: Administrative staff, Adequacy, Safety Measures and Noise Proof Facilicities

Introduction

Every organization desires to get the best out of its employees by ensuring that the physical work environment is adequate. Tertiary educational institutions as organizations are no exception. This is the reason why educationists continue to call for tertiary institutions to provide employees with conducive and healthy physical work environment to enable employees perform their office tasks optimally. The physical work environment consists of elements that relate to the office occupiers' ability to physically connect with their office environment. Haynes (2008) stated that the physical environment falls into two main categories: office layout (open-plan verses cellular offices) and office comfort (matching the office environment to the work processes). The Public Service Health and Safety Association, Ontario, Canada (2011) posited that physical environment comprises employees working conditions such as clean indoor air, safe drinking water and ergonomic works station designs, violence and aggression free work environment among others.

The physical work is a component of office education that teaches students the benefit of conducive physical work environment in office layout. Office education is a vocational education programme that prepares recipients for office careers through initial, refresher and upgrading education leading to employability and advancement in office occupation. Office education is an aspect of business education taught at secondary and higher education levels that equip students with skills to solve business and office occupation problems (Ogunmayi, 2008). Business education, according to Okoro (2015) is a programme that teaches students the fundamentals, theories and processes of business.

Every tertiary institution need to ensure that its offices are quiet, provided with safety precautions, sanitary conveniences, safe and appropriate work tools and furniture so as to ensure employee effectiveness. Conducive work environment ensures the wellbeing of employees which translates to better productivity (Akinyele, 2010). Creating an expressive, safe and healthy physical work environment that does no harm to the administrative staff and every other staff is an obligation for every tertiary institution. This is in realization of the fact that comfortable workers are the indispensable driving forces for reaching educational goals and for the maximization of sustained educational service delivery. The Offices Act as cited in Agbo, Ishiaku and Anikene (2007) stated that the presence of good environmental factors would make the office an ideal place to work in. The provision of conducive working environment has a positive and strong force on the worker's morale, interests and above all productivity. Marion (2014) agreed that physical work environment is one of the factors that can make a big difference to the workplace dynamism, individual service, well being, and job satisfaction.

The physical work environments include furniture, equipments, office accommodation, safety measures, conveniences and noise/sound proof facilities. However, this study focused on safety measures and noise/sound proof facilities. Safety measures also referred to as Occupational Safety and Health (OSH), Occupational Health (OH) or workplace health and safety (WHS) is concerned with the safety, health, and welfare of employees at work. The main focus of safety measures are the maintenance and promotion of workers' health and working capacity; the improvement of working environment and work to become conducive to safety and health and the development of work organizations and working cultures which supports health and safety at work (The World Health Organization (WHO, 2012). Many employees are not only interested on the salary scale when seeking for employment. They in addition, want good health and occupational safety. Employees expect safety measures to be put in place to minimize workplace accidents.

Office work cannot be efficiently carried out if there is constant noise. Therefore, it must be noted that if there is anything, employees need in their offices so as to concentrate on their work, it is calmness and noiseless conditions (Babalola, 2012). Babalola stated that noise has a detrimental effect on the physical and mental mechanism of employees. Noise/sound proofs facilities help reduce the noise effects in tertiary institutions. When noise is reduced, errors in work by both teaching and non teaching staff are reduced and productivity increases. Some of the noise/sound proofs are installing sound absorbent materials on the ceiling, walls and floors of the office, installing felt pads on computers among others.

According to Haynes (2008), the Health and Safety at Work Act 1974, the Health and Safety Regulation 1992, the World Health Organization (WHO), the International Labour Organization (ILO), American National Standard Institution (ANSI), Occupational Health and Safety Administrators (OSHA), International Ergonomic Society (ICS), among others have developed frameworks and legislation to protect workers' health in their work environment. However, despite all these legislations, Bibire and Ogunlana (2020) observed that the physical work environment in most tertiary institutions in Nigeria remains poor as most institutions lack adequate good lightning, heating/air conditioning and interior decoration. Ozongwu (2013) earlier revealed that the physical work environment of most government owned universities in Nigeria leaves much to be desired as their work environment is arguably poor. As laudable as the attempt to establish the Occupational Safety and Health bill of 2012 by Nigeria government, it could therefore means that employers are not effectively implementing the provisions of the legislations to the latter. Similarly, a researcher's visit to some of the tertiary institutions in the area of the study revealed that some of the office environment lack safety measures, and noise control/proof facilities. The resultant effects of these situations are incidents of sabotage and retaliation by administrative staff against the institution, absenteeism and employee turnover (Leblebici, 2012).

Administrative staffs are employees who perform clerical duties in nearly every industry (Fulton-Calkins, 2013). Most administrative staff duties revolve around managing and distributing information within an office. In the context of this study, administrative staff are employees of tertiary institutions who perform non-teaching functions and include managers, non-academic professionals, student welfare workers, secretaries, caretakers and cleaners. In tertiary institutions in Yobe State, the importance of adequate physical work environment of learning cannot be over-emphasized. Physical work environment such as safety measures and noise/sound proof facilities constitute strategic factors in tertiary institution's functioning and determine to a very large extent their smooth functioning (Owoeye & Yara, 2011).

Furthermore, ownership of institution may influence administrative staff rating of adequacy of physical work environment in tertiary institutions. Tertiary institutions in Nigeria can be federal owned or state owned. Federal owned institutions are those managed and funded by Federal government while state ones are managed and funded by state government. It could be that administrative staff in both Federal and State tertiary institutions has different views about the adequacy of safety measures and noise/sound proof facilities in their institutions. This could be as a result of physical work environment being more adequate in Federal owned institutions as compared to state owned due to better funding and infrastructures on ground. In support, Alabi in Folaranmi, Anunobi, Oyetola, Adebayo and Odine (2015) revealed that physical work environment was slightly higher in adequacy in Federal universities than State universities. However, Nwankwo (2014) revealed that lack of adequate funding and poor infrastructures are the greatest challenges facing Nigerian tertiary institutions. Nwankwo further regretted that lack of facilities and conducive learning environments have been the greatest impediment to lifelong tertiary education in Nigeria.

Despite the benefits of physical work environment of tertiary institutions in Yobe State, the researcher is worried by their lack or poor condition in some tertiary institutions she visited in the area of the study. The inadequacy of safety measures and noise/sound proof facilities in these institutions' offices makes it difficult for administrative staff to perform optimally in their offices and leads to absenteeism, sickness, low morale, high staff turnover, low productivity and inability of the organization to attain their set goals and objectives. Therefore, this study sought to identify through the rating of administrative staff in tertiary institution in Yobe State, the adequacy of (1) safety measures provided in the administrative offices of tertiary institution in Yobe State, (2) noise proof facilities provided in the administrative offices of tertiary institutions in Yobe State.

Research Questions

The following research questions guided the study;

1. How adequate is safety measures for staff in administrative offices of tertiary institutions in Yobe State?
2. How adequate is noise proof facilities provided in the administrative offices of tertiary institutions in Yobe State?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance.

1. There is no significant difference in the mean ratings of federal and state administrative staff on the adequacy of safety measures provided in administrative offices in tertiary institutions in Yobe State.
2. There is no significant difference in the mean ratings of federal and state administrative staff on the adequacy of noise proof facilities provided in their offices in institutions in Yobe State.

Review of Related Literature

The of studies carried out by other experts in safety measures and Noise proof facilities are reviewed under the following sub-headings:

Adequacy of Safety Measures/ Available in the Offices of Tertiary Institutions

Occupational Safety and Health (OSH), also commonly referred to as Occupational Health (OH) or workplace health and safety (WHS), is a multidisciplinary field concerned with the safety, health, and welfare of people at work. According to the World Health Organisation (WHO, 2012), the main focus of safety measures are the maintenance and promotion of workers' health and working capacity; Leblebici (2012) stated that the Health and Safety at Work Act, 1974 require an employer to provide employees with a written policy statement on the organization's arrangements pertaining to health and safety at work. The Act further stated that an employer is made liable for personnel injury suffered by an employee as a result of defects in equipment provided by the employer. Similarly, the National Institute for Occupational Safety and Health (2008) listed safety measures to include; personal protective equipment (PPE) (protective clothing, helmets, goggles, respirators (Gas masks, particulate respirators, airline respirators and self-contained breathing apparatus (SCBA), gloves (rubber gloves, cut-resistant gloves, chainsaw gloves and heat-resistant gloves) used to protect the skin from occupational skin diseases.

Adequacy of Noise Proof Facilities Provided in the Offices of Tertiary Institutions

Noise problem in an office is something that could not be avoided. Studies have shown that when sound is turned off, errors in work are reduced and productivity increases. Sundstrom, Town, Rice, Osborn and Brill (1994) identified noise as an ambient stressor relating to job satisfaction in the work environment. Sundstrom et al. stated that noise disrupt performance of employees. Smith (2009) posited that noise affects employees' productivity. The author further stated that open office noise can be stressful and de-motivating. According to Denyer (2011), steps to reduce noise in offices include installing a sound absorbent materials on the ceiling, walls and floors of the office, installing felt pads on computers and other machines that produce sound, changing the ringing phone to the buzzers' system, light indicators' or bleeps. Littlefield (2010) posited that slamming of door, sounds of footsteps on the floor have remarkable influence on the morale and level of performance of staff. Denyer (2011) recommended that ceiling and parts of the office wall should be treated with sound-absorbents (acoustic) tiles or other materials to reduce noise effects. Also, placing of felt pads under the computers and other machines, and putting non-slam springs on all doors or hydraulics controls and keeping doors facing the main entrance short can help in eliminating noise in offices. Duru and Shimawua (2017) stated that facilities for reducing noise include using damping structures such as sound baffles, or using active anti-noise sound generators.

Method

The design adopted for this study was the descriptive survey design. The population for this study consisted of 1,032 (564 federal and 486 state) administrative staff of tertiary institutions in Yobe State. A sample size of 310 administrative staff of tertiary institutions was selected for this study using 30% of the population in each tertiary institution covered. The instrument for data collection was a 16-item structured questionnaire titled "Adequacy of Physical Work Environment in Tertiary Institutions (APWETI). The instrument was structured on a five point rating scale of Highly Adequate – 4, Adequate - 3, Lowly Adequate – 2, and Not Adequate – 1. The face validity of the instrument was ascertained using the opinions of two experts in Business (office) Education and one in Measurement and Evaluation in Nnamdi Azikiwe University, Awka. The reliability of the instrument was established through pilot-testing and data collected were analyzed using Cronbach Alpha which yielded correlation values 0.83 and 0.81 for clusters B_1 to B_2 respectively with an overall reliability value of 0.82 obtained. Mean scores and standard deviation were used to analyze data relating to the two research questions and to determine the homogeneity of the respondents' ratings while the t-test was used to test the hypotheses. A null hypothesis was accepted where the p-value is equal to or greater than the 0.05 alpha level; otherwise, the null hypothesis was rejected. The analysis was carried out using SPSS version 23.0.

Results

Research Question 1

How adequate is safety measures provided in the administrative offices of tertiary institutions in Yobe State?

Table 1: Mean ratings and standard deviation on adequacy of safety measures provided in the administrative offices of tertiary institutions in Yobe State N = 298

S/N	Safety Measures	Mean	SD	Decision
1.	Instructions to employees on safety measures	2.31	.82	Lowly Adequate
2.	Fire extinguishers	2.26	1.90	Lowly Adequate
3.	First aid kits	2.17	.82	Lowly Adequate
4.	Self-contained breathing apparatus (SCBA)	2.03	.87	Lowly Adequate
5.	Gloves (rubber gloves, cut-resistant gloves and heat-resistant) used to protect the skin from occupational skin diseases	2.10	1.50	Lowly Adequate
6.	Training of employees on safety techniques	2.05	.89	Lowly Adequate
7.	Safe-contained breathing apparatus	2.02	.83	Lowly Adequate
8.	Periodic evaluation of employees and departments	2.32	.94	Lowly Adequate
9.	Visual examination of floors such as cracks	2.12	.88	Lowly Adequate
10.	Personal protective equipment	2.06	.83	Lowly Adequate
	Cluster Mean	**2.14**		**Lowly Adequate**

Table 2 shows that all the items with mean scores ranging from 2.02 to 2.31 are rated lowly adequate. The cluster mean score of 2.14 indicates that on the whole, safety measures provided in administrative offices of tertiary institutions in Yobe State are lowly adequate. The analysis shows that responses to items 24 and 27 have the highest deviation (1.50 and 1.90) among respondents, this suggests that the respondents are quite divided in their opinions as to whether fire extinguishers and gloves are lowly adequate in offices in tertiary institutions in Yobe State. Other items show homogeneity in the respondents' responses.

Research Question 2

How adequate is noise proof facilities provided in administrative offices of tertiary institutions in Yobe State?

Table 2: Mean ratings and standard deviation on adequacy of noise proof facilities provided in administrative offices in tertiary institutions in Yobe State N = 298

S/N	Noise Proof	Mean	SD	Decision
11.	Installed sound-deadening drapes on the walls of offices	2.15	.82	Lowly Adequate
12.	Installed sound-deadening mats on the ceilings of offices	1.94	.79	Lowly Adequate
13.	Installed felt pads on computers	2.22	.88	Lowly Adequate
14.	Providing small rooms in the office for discussion purposes	2.15	.85	Lowly Adequate
15.	Floor covering such as carpet to minimize noise effects	2.37	.89	Lowly Adequate
16.	Non-slam springs on all doors	2.06	.86	Lowly Adequate
	Cluster Mean	**2.15**		**Lowly Adequate**

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Table 2 shows that all the items with mean scores ranging from 1.94 to 2.37 are rated lowly adequate. The cluster mean score of 2.15 also indicate that noise proof facilities provided in administrative offices in tertiary institutions in Yobe State are lowly adequate. The standard deviation shows homogeneity amongst responses indicating a greater consensus of opinion.

Hypothesis 1

There is no significant difference in the mean ratings of federal and state administrative staff on the adequacy of safety measures provided in the administrative offices of tertiary institutions in Yobe State.

Table 3: Summary of t-test analysis of mean ratings of federal and state administrative staff on the adequacy of safety measures provided in the administrative offices of tertiary institutions in Yobe State

Safety Measures	N	$\bar{X}$	SD	df	P-value	Decision
Federal	159	2.05	0.75			
				296	0.00	Significant
State	139	2.25	0.59			

Table 3 shows that there is significant difference in the mean ratings of federal and state administrative staff on the adequacy of safety measures provided in the administrative offices of tertiary institutions in Yobe State. This is shown by the p-value of 0.00, which is less than the significance level of 0.05. The null hypothesis of no significant difference between the two groups is therefore rejected.

Hypothesis 2

There is no significant difference in the mean ratings of federal and state administrative staff on the adequacy of noise proof facilities provided in the administrative offices of tertiary institutions in Yobe State.

Table 4: Summary of t-test analysis of mean ratings of federal and state administrative staff on the adequacy of noise proof facilities provided in the administrative offices of tertiary institutions in Yobe State.

Noise proof facilities	N	$\bar{X}$	SD	df	P-value	Decision
Federal	159	2.07	0.67			
				296	0.03	Significant
State	139	2.24	0.57			

Table 4 shows that there is a significant difference in the mean ratings of federal and state administrative staff on the adequacy of noise proof facilities provided in the administrative offices of tertiary institutions in Yobe State. This is shown by the p-value of 0.03, which is less than the significance level of 0.05. The null hypothesis of no significant difference between the two groups is therefore rejected.

Discussion

Findings of the study showed that administrative staff rated safety measures provided in the offices of tertiary institutions in Yobe State lowly adequate. This finding is in consonant with that of Umoh and Torbira (2013) who revealed that there was inadequate provision of safety equipments in organizations (tertiary institutions included). In support, Iheanacho and Ebitu (2016) reported that safety measures in

organizations are inadequate despite the fact that their adequacy has a significant effect on their job performance. Agwu (2012) stated that adequacy of safety measures improves organizational performance (improved employees safety practices, enhanced productivity, increased profitability and reduced accident/ incident rate). It also leads to the inculcation of employees' safety culture. Agwu however, regretted that safety measures are not highly adequate in organizations. The findings also showed that there was a significant difference in the mean ratings of federal and state administrative staff on the adequacy of safety measures provided for staff in their offices in tertiary institutions in Yobe State. This finding is in contrast with Iheanacho and Ebitu's (2016) study who disclosed that safety measures are inadequate in tertiary institutions in Nigeria.

Findings of the study revealed that noise proof facilities provided in offices of tertiary institutions in Yobe State lowly adequate. The findings agree with that of Khajenasiri, Zamanian and Zamanian (2016) who revealed that sound proof facilities are inadequate in most tertiary institutions. This supports the earlier findings of Ewa (2013) who affirmed that traffic noise, industrial noise and commercial/social noise pollution negatively affect the smooth cognitive, psychomotor and affective functioning of the administrative staff in the tertiary institutions. According to Punadi (2015) physical work environment factors such as building aesthetic, furniture arrangement, noise proof facilities and ventilation aid staff performance. Punadi however revealed that these facilities are not adequate which contribute to inefficiency of the staff. The findings also indicated that ownership of institution significantly influence the mean ratings of administrative staff on the adequacy of noise proof facilities provided in offices in tertiary institutions in Yobe State. This finding disagrees with the findings of Umar and Ma'aji (2010) who revealed that physical work environment of tertiary institutions in Nigeria is generally poor and unconducive for staff and students.

Conclusion

The physical work environment is very vital to the optimum performance of administrative staff in tertiary institutions in Nigeria, be it federal or state institutions. The findings of this study showed that safety measures and noise proof facilities covered in this study are lowly inadequate in tertiary institutions in Yobe State. Based on the findings of this study, the researcher concludes that there is need to improve the physical work environment of tertiary institutions in Yobe State.

Recommendations

Based on the findings of this study, the following recommendations are made.

1. The federal and state governments should increase the funding of tertiary institutions to improve safety measures and noise proof facilities in the institutions. This will enable the administrative staff of the universities to carry out their job tasks effectively.
2. Administrators of tertiary institutions should ensure that funds provided for the upgrade of safety measures and noise proof facilities are judiciously utilized. This will improve the availability and adequacy of these facilities in the tertiary institutions for enhanced better service delivery by the administrative staff.
3. Administrators of tertiary institutions in Yobe State should collaborate more with private sectors in the areas of provision of safety measures and noise proof facilities.

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