

Occupational Health and Safety Hazards and Risks in Nigerian Commercial Banks

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Abstract— This study investigated the occupational health and safety hazards and risks among bank workers, using banks in Lagos State as a case study. A cross sectional survey method of research design was adopted for the study. Sample size of 355 respondents were randomly selected from six commercial banks. The instruments for data collection were validated and questionnaire designed to a 5 Point Likert scale with a reliability coefficient of 0.84. Data were analyzed using descriptive statistics of percentage, frequency distribution, mean and standard deviation. Results showed that the top most common hazards the workers encountered were stress with criterion mean of 3.18, workload with criterion mean of 2.97, eyes strain with criterion mean of 2.68, noise with criterion mean of 2.6366 and ergonomic strain with criterion mean of 2.44. The least common occupational health and safety hazards the bankers experience were poor body posture (criterion mean - 2.23), poor ventilation (criterion mean - 2.26), poor housekeeping (criterion mean-2.21), sexual harassment (criterion mean-2.14), and workplace violence (criterion mean-2.12).

Index Terms— Occupational health and safety hazards, Risks, Stress, Workplace injuries, Nigerian banks.

I. INTRODUCTION

Report shows that approximately 2.2 million deaths are recorded each year due to work-related accidents or ill health, which is equivalent to the population of some small countries [1]. These deaths could have been prevented with effective safety procedures in place. Reports show that attention given to health and safety in the workplace is quite poor in developing nations; exposure to hazard is high, tasks are mostly performed manually, and the quality or standard of record keeping is poor [2]-[4]. The International Labor Organization (ILO) encourages development of reliable report on; causes of occupational accidents, how to eliminate or minimize these accidents and general OHS in work-place. Based on these reports, countries should initiate and develop suitable national programmes to minimize or eliminate accident occurrence in work-environment [1].

The report of [5] shows that over 2.31 million deaths of workers globally, is from accidents and diseases at work. This results to huge economic-loss, human suffering, and reduced productivity etcetera. It also assessed the cost-effect of this in

workplaces at approximately 4% of Gross-National-Product of each nation. This estimate is higher in developing nations where safety performance is low compared to already developed countries[6]. Employees have a responsibility, which is; to work safe with hazardous-materials, protect themselves, learn to identify and prevent hazards in workplaces. According to [7], work-related hazards include psychosocial, physical, mechanical, chemical and biological.

Different countries encounter different risks and these risks are peculiar to each sector. Hence, the call for national plans on OHS to curb the situation, which forms the framework of the ILO safety and health. From report, 350,000 fatal accidents, 264 million non-fatal accident occurred in 1998 worldwide. Furthermore, 160 million workers suffer from work-related diseases, resulting to absence of workers for some days in workplaces. This report varies across countries based on the nations OHS state [1].

Banking is in the service sector of the economy. The service sector consists of the "soft" parts of the economy and activities where people offer their knowledge and time to improve productivity, performance, potential, and sustainability, what is termed affective labor [8]. The basic characteristic of this sector is the production of services instead of end products. A bank is a financial institution and a financial intermediary that accepts deposits and channels those deposits into lending activities, either directly by loaning or indirectly through capital markets. Banks also enable customer payments via other payment methods such as Automated Clearing House (ACH), wire transfer and automated teller machine (ATM). It is a well-known fact that the banking sector has continued to be one of the largest employers of labour in Nigeria [9]. Before the latest reforms, the banking sector was the second highest employer of labour after government [10]. This means that Bankers constitute a reasonable amount of the Nigerian labour force. Nigerian Bankers work long hours, starting each day's job early in the morning and sometimes closing as late, as midnight; working from 12 -15 hours and more daily which may even extend to weekends. The nature of the bank work and the working environment can have negative impacts on the health of the banker [8]. Posture problems from sitting or standing too long in a static position, vision difficulties from gazing into a computer screen for prolonged periods of time, musculoskeletal disorders, unhealthy eating habits, stress problems resulting from overwork, mental health issues caused by job insecurity, harassment, abuse, bullying, friction etc. are just some of the health hazards and risks that can ensue as a result of working in a Nigerian bank.

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Given that there is no comprehensive and complete information based on occupational hazards and risks in Nigerian commercial banks, the purpose of this study was to identify the information gap on the hazards and risks experienced by bank workers in Lagos State. This study therefore aims to identify the occupational health and safety hazards and risks among bank workers in Lagos State, examine the perception of bank workers on occupational hazards and risks, and their perception on the management of occupational health and safety hazards and risks.

II. RESEARCH METHODOLOGY

A. Research Design

The study used a descriptive survey research design method. Descriptive survey research design method was considered appropriate as it is efficient, fast, accurate and less expensive method of extracting information from a population and has been used in similar studies carried out by [8], [11]- [13]. This study was carried out to assess the occupational hazards risks encountered in Nigerian commercial banks and how these hazards and accompanying risks are managed.

B. Study Area

The study area for this research is Lagos, the fifth largest economy in Africa, located in the south west region of Nigeria and circumscribed by Ogun state to the north and east, west by Republic of Benin and to the south, by the Atlantic Ocean. The choice of Lagos as the study area is premised on its commercial nature, advance urbanization, and vast population.

Lagos which lies on geographic coordinates of 6 35N and 3 45 E spreads over 3,577 kilometers accommodates head offices of most banks in Nigeria, multinational organizations, embassies, and supermarkets and is also known to support new businesses and commerce, and has twenty local government areas, and a GDP of \$91 billion. All commercial banks except one have their headquarters in Lagos and several

branches operating across Lagos. They all have centralized operations driven by technology and have accessible branches.

C. Study Population

Twenty-three commercial banks are licensed to render financial services in Nigeria by the Central Banks of Nigeria, the regulator of banks in Nigeria. Workers in six banks namely United Bank of Africa, First Bank of Nigeria, Union Bank of Nigeria, Fidelity Bank Plc, First City Monumental Bank Plc and Providus Bank Limited were sampled.

Table 1 shows the population size of the workers in the selected commercial banks. The population consists of different categories of bank workers including Branch Manager, Branch Operation Manager, Relationship Manager, Operation Executives, Occupational Health and Safety Management System Coordinators and Customer Service Officers.

Table 1: Population of staff in the six selected commercial banks

SN	Tier	Name of Bank	Population	Percent
1	1	First Bank	800	25.26
2	1	UBA	900	28.42
3	1	Union Bank	780	24.63
4	2	Fidelity Bank	382	12.06
5	2	FCMB	180	5.68
6	3	Providus Bank	125	3.95
Total			3167	100

D. Sampling Technique

The study used three sampling techniques namely disproportionate stratified random sampling, purposive sampling and simple random sampling techniques. 25% of the commercial banks in Nigeria were purposively selected for the study based on their brand value and visibility, spread, transactional volume, accessibility and willingness to participate in the study. The six banks thus selected were from all the three tiers of the commercial banks, another form of categorization of the commercial banks by rating firms including the Central Bank of Nigeria. In addition, disproportionate stratified random sampling technique was utilized at the discretion of the researcher on the population which had three distinct categories of commercial banks into Tier 1, Tier 2 and Tier 3 and based on history of corporate performance of the banks over the years, size of business, asset base, management competence, credit rating and brand value among others. The disproportionate population selected was in the ratio 3:2:1.

Lastly, simple random sampling technique which gives room for equal chance of selecting bank workers was used for the selection of respondents in the study. The bank workers selected by simple random sampling technique provided information on the occupational health and safety hazards and risks in the bank.

E. Data Collection

Questionnaire was used as the main instrument for the collection of primary data for this study. A well-structured questionnaire modelled after the ISO 45001 occupational health and safety management system standard and similar to the instrument used by [13], [14] were randomly distributed to staff of the banks within the study area. 355 respondents participated in the study. The respondents were chosen from different areas of the banks and occupied roles vital to the banks operations.

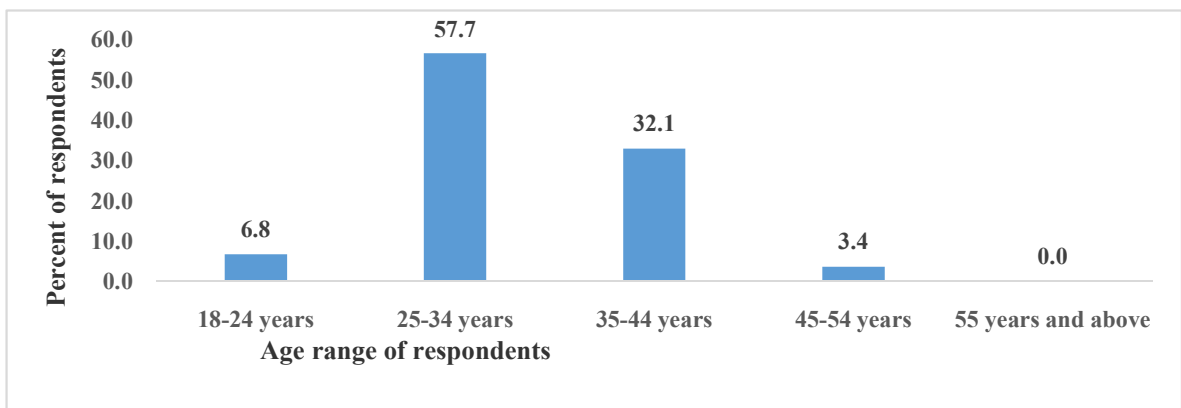
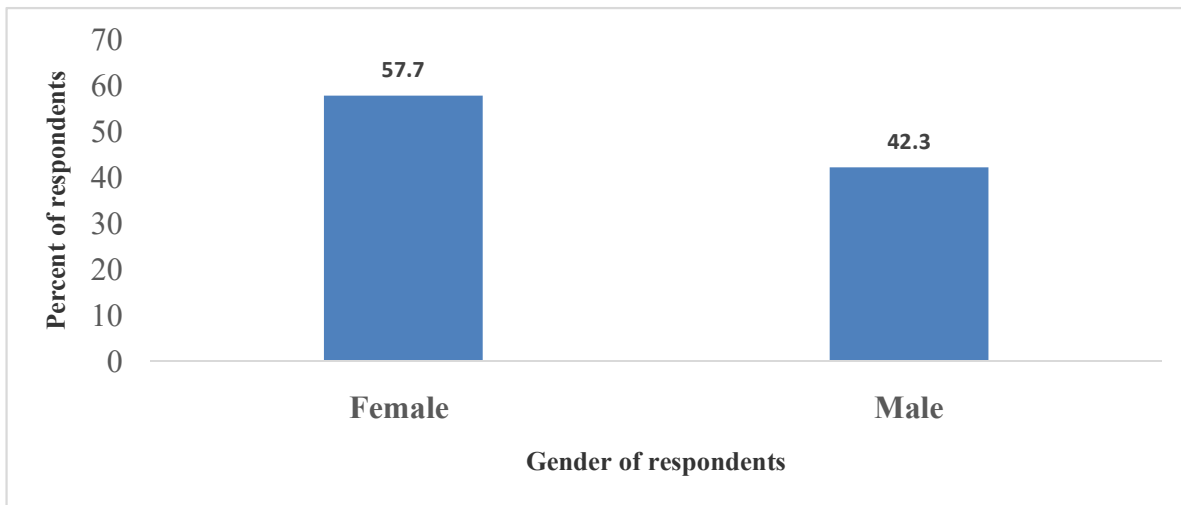
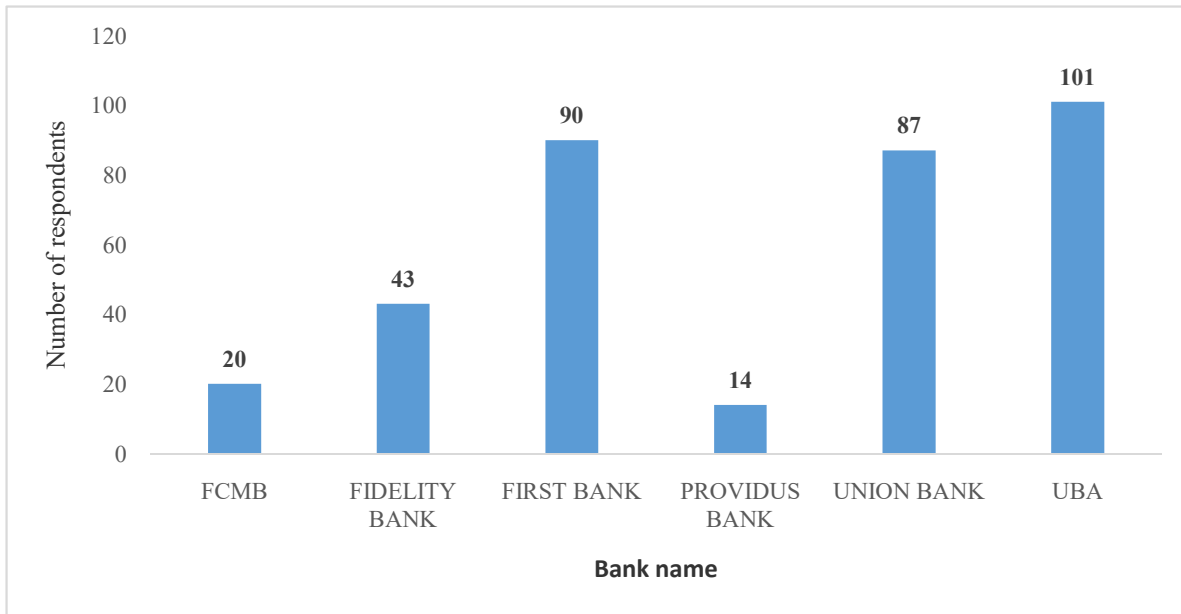
F. Data Analysis

Data analysis was performed using SPSS software version 22. Data gathered were presented via tables and charts and analyzed using frequencies, mean, percentages and standard deviation.

III. RESULTS

The demographic distribution of the respondents is shown in Figure 1. The figure shows that 57.7% of the respondents were female, while 42.3 % of the respondents were male. A lot of the respondents were within the age range of 25-34 years which accounted for 57.7% of the sample size. 32.1% of the respondents were within the age range of 35-44 years,

while 3.4% of the respondents were within the age range of 45-54 years and 6.8% of the respondents were within the age range of 18-24 years. No respondent was within the age range of 55 years and above in the population. However, majority of the respondents are bachelor degree holders, corresponding to 56.9% of the population, while 23.9% of the respondents hold NCE/HND degree. 15.2% of the respondents have master degree while 0.6% each hold Ph.D. degree and WASC certificate.



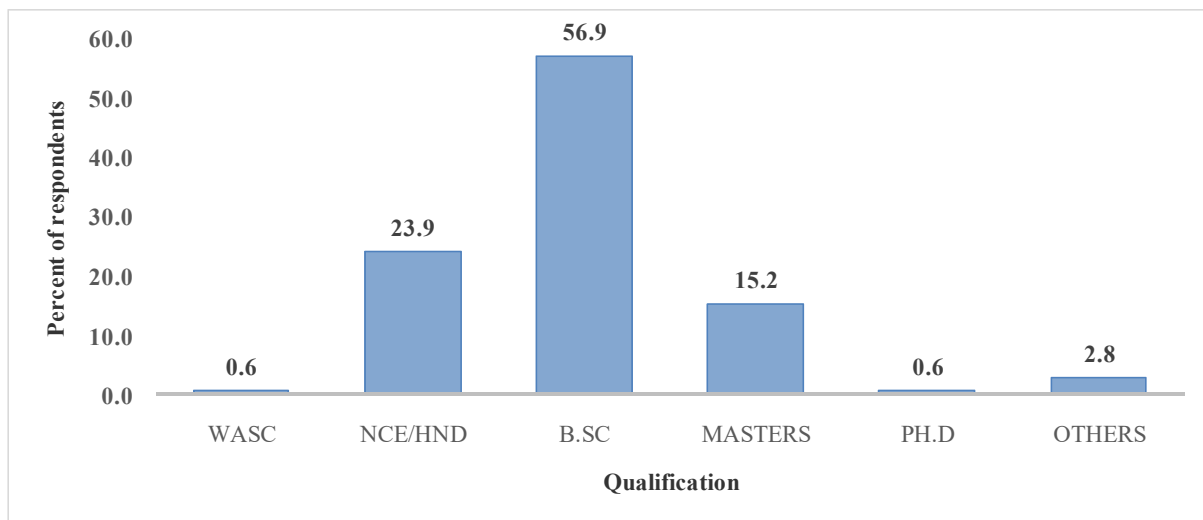


Figure 1: Demographic distribution of Respondents

Table 2 shows the opinions of the respondents on each of the twenty occupational health and safety hazards in the banks to varying proportions from not sure, not at all, some extent, great extent and to very great extent. Common occupational health and safety hazards in the commercial banks include stress (75.21%, n=267), workload (67.34%, n=238), eye strain (56.34%, n=200). 41.12% of the respondents, corresponding to 146 respondents have slipped at one time or the other while 58.88% of the respondents have not. However, majority of the respondents (80.57%, n=286) have not witnessed workplace violence. The respondents agreed that less common occupational health and safety hazards in the banks include poor body posture (74.37%, n=267), poor ventilation (77.47%, n=275), poor housekeeping (74.65%, n=265), victimization (70.99%, n=252) and sexual harassment (82.82%, n=297).

Table 3 shows the ranking of occupational health and safety hazards the bank workers suffer from while working for commercial banks. The top most common hazards the workers encounter are stress with criterion mean of 3.1803, workload with criterion mean of 2.9746, eyes strain with criterion mean of 2.6845, noise with criterion mean of 2.6366

and ergonomic strain with criterion mean of 2.4423. The least common occupational health and safety hazards the bankers experience are poor body posture (criterion mean - 2.2310), poor ventilation (criterion mean - 2.2697), poor housekeeping (criterion mean-2.2169), sexual harassment (criterion mean-2.1437), and workplace violence (criterion mean-2.1296).

Table 4 shows the top most commonly employed methods and tools for managing occupational health and safety hazards and risks which are as follows: pre-employment screening (3.7332), awareness and sensitization of staff (3.7070), annual medical examination (3.6894), involvement of workers in identifying work related

hazards and risks, and corresponding controls (3.6282) and identification of hazards (3.6169). However, the least common approaches are the use of tips and videos on health and safety (3.2698), audit (3.2113), publication and communication of occupational health and safety policy (3.1831), administration of occupational health and safety assessment checklist (3.0282) and appointment of Incident/HSE Manager (2.9239).

Table 2: Data collected on Occupational Health and Safety Hazards in the Banks

SN	Occupational Health and Safety Hazards	Not Sure (1)	Not at All (2)	Some Extent (3)	Great Extent (4)	Very Great Extent (5)
1	Slips	55 15.49%	154 43.38%	119 33.52%	20 5.63%	7 1.97%
2	Workplace Violence	57 16.06%	229 64.51%	44 12.39%	16 4.51%	9 2.54%
3	Falls	46 12.96%	192 54.08%	90 25.35%	23 6.48%	4 1.13%
4	Trips	48 13.52%	156 43.94%	135 38.03%	12 3.38%	4 1.13%
5	Noise	32 9.01%	127 35.77%	143 40.28%	44 12.39%	9 2.54%
6	Poor Lighting	41 11.55%	177 49.86%	103 29.01%	29 8.17%	5 1.41%
7	Ergonomic Strains	49 13.80%	154 43.38%	108 30.42%	34 9.58%	10 2.82%
8	Eye Strains	37 10.42%	118 33.24%	131 36.90%	58 16.34%	11 3.10%
9	Poor work station	32 9.01%	195 54.93%	87 24.51%	30 8.45%	11 3.10%
10	Poor indoor air quality	44 12.39%	190 53.52%	84 23.66%	25 7.04%	12 3.38%
11	Workload	26 7.32%	91 25.63%	138 38.87%	66 18.59%	34 9.58%
12	Dust	52 14.65%	189 53.24%	63 17.75%	44 12.39%	7 1.97%
13	Chemical-Detergent/Cleaning Solution	46 12.96%	196 55.21%	74 20.85%	30 8.45%	9 2.54%
14	Poor house keeping	47 13.24%	218 61.41%	63 17.75%	20 5.63%	7 1.97%
15	Poor Ventilation	41 11.55%	234 65.92%	48 13.52%	25 7.04%	7 1.97%
16	Electric Shock	51 14.37%	182 51.27%	86 24.23%	24 6.76%	12 3.38%
17	Poor Body Posture	47 13.24%	217 61.13%	63 17.75%	18 5.07%	10 2.82%
18	Victimization	46 12.96%	206 58.03%	52 14.65%	40 11.27%	11 3.10%
19	Sexual Harrassment	53 14.93%	241 67.89%	27 7.61%	25 7.04%	9 2.54%
20	Stress	16 4.51%	72 20.28%	143 40.28%	80 22.54%	44 12.39%

Table 3: Perception of Bank Workers on Occupational Health and Safety Hazards

Occupational Health and Safety Hazards	N	Minimum	Maximum	Criterion Mean	Standard Deviation
Stress	355	1	5	3.1803	1.0352
Workload	355	1	5	2.9746	1.0572
Eye Strains	355	1	5	2.6845	0.9680
Noise	355	1	5	2.6366	0.9009
Ergonomic Strains	355	1	5	2.4423	0.9398
Poor work station	355	1	5	2.4169	0.8822
Poor Lighting	355	1	5	2.3803	0.8453
Poor indoor air quality	355	1	5	2.3549	0.9058
Slips	355	1	5	2.3521	0.8769
Trips	355	1	5	2.3465	0.7950
Dust	355	1	5	2.3380	0.9396
Electric Shock	355	1	5	2.3352	0.9210
Victimization	355	1	5	2.3352	0.9451
Chemical-Detergent/Cleaning Solution	355	1	5	2.3239	0.8940
Falls	355	1	5	2.2873	0.8131
Poor Body Posture	355	1	5	2.2310	0.8443
Poor Ventilation	355	1	5	2.2197	0.8134
Poor house keeping	355	1	5	2.2169	0.8159
Sexual Harrassment	355	1	5	2.1437	0.8453
Workplace Violence	355	1	5	2.1296	0.8223

Table 4: Perception on Management of Occupational Health and Safety Hazards and risks

How Banks manage Occupational Health and Safety Hazards and Risks	N	Minimum	Maximum	Criterion Mean	Std. Deviation
Pre-employment screening	355	1	5	3.7324	1.1623
Awareness and sensitization of staff	355	1	5	3.7070	1.0609
Annual Medical Examination of staff	355	1	5	3.6394	1.1529
Involvement of workers in identifying work hazards and risk, and corresponding controls	355	1	5	3.6282	1.0194
Hazard Identification	355	1	5	3.6169	1.0399
Regular communication to workers	355	1	5	3.5859	1.0853
Training for staff on safe practices	355	1	5	3.5859	1.1335
Top Management attitude and disposition	355	1	5	3.4282	1.1245
Use of HSE tips and videos	355	1	5	3.2648	1.2092
Conduct audit periodically on all locations and works	355	1	5	3.2113	1.2550
Elaboration and issuance of OH & S policy to employees	355	1	5	3.1831	1.1569
Administration of OH&S Assessment checklist	355	1	5	3.0282	1.1673
Appointment of Incident Manager/HSE Manager	355	1	5	2.9239	1.2160

IV. DISCUSSION

The study revealed that 75.25% of the respondents who are workers of the six commercial banks surveyed suffered from stress, a type of hazard in the workplace. This is similar to the findings of [15], [16],[8] who argued that stress was a daily experience of bank workers. This further support the findings presented in Table 3 which showed that stress has the highest criterion mean of 3.18 out of all other occupational health and safety hazards the respondents provided their perceptions on. The perceptions of the bank workers on the occupational health and safety hazards also showed that they are exposed marginally to some other forms of hazards as revealed in Table 2 to great extent. The extent to which the respondents experienced the occupational health and safety hazards in the banks varied as follows: 67.04% of the bank workers are exposed to workload; 56.34% of the respondents suffer eye strains.

Furthermore, 55.21% of the respondents experienced noise, 42.82% of the respondents suffered ergonomic strains which appeared to be lower in the study carried out by [17]. Other occupational health and safety hazards which the bank workers are exposed to at lower levels are poor body posture, sexual harassment, workplace violence, falls, slips, trips, poor ventilation, poor work stations, victimisation and dust. Table 3 shows the hazards and criterion mean of the hazards based on the perception of the respondents. The Occupational Health and Safety (OHS) hazard with most criterion mean was stress (3.1803), followed by workload (2.9746), and next, eye strain (2.6845), and following eye strain was noise (2.6366) and after noise, was ergonomics strain with criterion mean of 2.44. The results also threw up other OHS hazards affecting the productivity and quality of work of the bank workers. They are falls (2.2310), trips (2.3465), slips (2.3521). The least hazard the bank workers are faced based upon the perception provided was workplace violence with criterion mean of 2.1296, followed by sexual harassment with criterion mean of 2.1437.

With the above findings, the organizations are thus offered the opportunity to address identified and critical areas of vulnerability and rightly design appropriate programs to improve health and safety of the employees. Results of the study showed that stress, workload and eye strain were the major hazards experienced by Nigerian commercial bank workers. The implication is that these hazards would affect productivity to an extent, mar performance and create bodily pains as advanced in the work of [12], [16].

The results of the study presented in Table 4 showed that many methods and approaches are used to manage occupational health and safety hazards common to the bank workers working in the six commercial banks surveyed based on the perceptions of these workers. The summary of perceptions of bank workers on the question asked on management of occupational health and safety hazards in their banks suggested the following: pre-employment screening with criterion mean of 3.7324 appeared to be seen as crucial in addressing occupational health and safety hazards. The responses of the respondents also showed that awareness, education and sensitization are highly important and should be engaged as a method that could help eliminate

occupational health and safety hazards in the banks. This align with the view of [18] which suggests that safety education is the only available method of creating positive attitudinal changes of stakeholders of an organization and concluded that education significantly correlated with safety awareness among workers of an organization.

The criterion means of 3.7070 for awareness and sensitization was the second highest in the perceptions rating of the bank workers of the six commercial banks. Other perceptions held by the bank workers on the question of occupational health and safety hazards management include: annual medical examination of staff with criterion mean of 3.6344 , involvement of workers in identifying controls (3.6282), hazard identification (3.6169), regular communication to workers (3.5859), top management commitment and disposition which has criterion mean of 3.4252 which further agrees with result of the hypothesis which showed that there was a strong correlation between top management commitment and walking the talks with the ability of the organization to eliminate hazards and minimize risk.

V. CONCLUSION

The study concluded that stress had the highest criterion mean of 3.1803 and 2.1296 was the least criterion mean attributed to workplace violence. Furthermore, the perceptions of bank workers have revealed that banks address their occupational health and safety hazards and risks with a form of standard prescription based on ISO 45001 occupational health and safety management system standard. This implies that the banks have structured processes that identify hazards, assess the hazards and control the risk.

Conflict of Interest

The author(s) declare no potential conflict of interest with respect to the research, authorship, and/or publication of this article.

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