



Occupational Safety Education Programmes for Managing Work-Related Stress among Adult Education Lecturers in Public Universities in Rivers State

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ABSTRACT

The study examined occupational safety education programmes for managing work-related stress among Adult Education lecturers in public universities in Rivers State. To achieve the purpose of the study, the study developed three (3) objectives of the study, research questions and hypotheses that guided the conduct of the study. The study adopted descriptive survey design. The area of the study was Port Harcourt Metropolis in Rivers State. The population of the study was made up of 45 Adult Education lecturers in public universities in Rivers State, (Rivers State University, University of Port Harcourt and Ignatius Ajuru University of Education). The entire population of this study was taken as census without sampling. This is because it is small and manageable. The instrument used for the study was a structured questionnaire titled: "Occupational Safety Education Programmes for Managing Work-Related Stress Questionnaire. The instrument was validated by two experts. A test of internal consistency using Cronbach Alpha method was used for the reliability of the instrument. Cumulative reliability coefficient of 0.82 was obtained showing the instrument was reliable. The research questions were analysed using mean and standard deviation statistics while the null hypotheses were tested using z-test statistics at 0.05 level of significance. Based on the analysis, the study revealed that occupational safety education on health, unsafe act auditing and good housekeeping helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State to a high extent. Based on the findings, the study recommended among others that the university authorities in collaboration with the universities and external medical centres should organize health seminars, conferences and workshops on the need for regular medical checkups, proper nutrition and eating habits, regular exercises, good sleeping habits, importance of vacations and discourage self medication. However, it was also concluded that occupational safety education programmes on health, unsafe act auditing and good housekeeping, are found to help lecturers manage these work-related stress to a high extent.

Keywords: Occupational Safety, Education, Work-Related Stress.

Introduction

University education is designed to produce high level manpower that will function in different sectors of the economy of every country. According to the Nigerian National Policy on Education (2013) universities are saddled with the primary responsibility of knowledge transmission and knowledge creation. These responsibilities rest on the shoulders of lecturers who engage in teaching, regular study, research and also carry out community service. This keeps them at the apex of the knowledge industry. The need for lecturers to perform optimally at their roles and responsibilities becomes imperative if the educational sector must survive and keep up with the dynamism of the world.

Osaat and Ekechukwu (2017) opined that academic staff are the major stakeholders in the university. Their primary responsibilities are to equip learners with knowledge and skills for growth and development. Apart from the task of teaching, lecturers are also saddled with other responsibilities within the university such as holding administrative positions which include various directors of units, Deans of Faculties, Heads of Departments, exam and record officers, coordinators of programmes, time table officers, members of various committees in the university, government administrations, etc. Besides these, they are also expected to attend conferences on regular basis and publish well researched papers in reputable journals and write books. Lecturers are also faced with the responsibilities of teaching different categories of students, which include

undergraduate regular students, part-time students, post graduate students and sandwich students during long vacations when these lecturers are to rest and give attention to their personal and family needs. These sometimes strain their relationship with family. Furthermore, the researchers observed that some lecturers in public universities in Rivers State take back to back classes, instances of classes scheduled for a lecturer from 8am to 10am, 10am to 12noon, 12noon to 2pm down to 4pm, this accumulate a whole lot of work-related stress to these lecturers.

Work-related stress exposes lecturers to ailment such as hypertension, stroke, early aging and in worst case scenario, death. Lecturers in Nigerian universities barely go on vacations and rest unlike their counter parts in other countries as they run academic programmes throughout the year. The National Universities Commission (NUC) Benchmark Minimum Academic Standard (BMAS) recommends 1:30 (1 lecturer to 30 students) for Faculty of Education, Agricultural Science 1:15, Art 1:30, Engineering 1:15, Law 1:30, Management Sciences 1:30, Science 1:20, Social Sciences 1:30 (NUC, 2007). The researcher observed however, that lecturers in public Universities in Rivers State operate in a ratio of 1:100. That is, one lecturer to one hundred students and above because of inadequate man power in the tertiary institutions. Unfortunately, academic staff are not recruited to measure up with the increasing number of students' enrollment in the universities, hence, academic staff are observed to have heavy workload in most universities in Rivers State and Nigeria at large (Osaat & Ekechukwu, 2017).

Also, the nature of their jobs requires the use of technological devices such as laptops and computers, thereby making them expose their eyes to screen for hours, which causes photophobia. Standing and talking for hours, marking of large numbers of scripts, this affects the brain cells and causes early aging, working in a hot environment, etc. This explains how lecturers are exposed to high risk which affects their health and life span.

The American Psychiatric Association (2014) described Stress as a sense of being overwhelmed, worry, destruction, stress, exhaustion, and lethargy. Therefore, stress can influence people in every age, sex, race, and situation and can result in both physical and psychological health. Also, stress has different effects on sexes. Results of various studies about occupational stress indicate that women experience more stress than men in their workplace. Further, Behnoudi (2005) viewed stress as a situation in which an individual is forced to act, and cannot bear the received mental tension. In other words, stress means readjustment of individual with new situations and conditions. Whenever a change occurs in life, individual is confronted with stress. This also explains why there is a need for proper education and sensitization to enable lecturers cope and manage this stress so that they don't break down. Occupational safety education programmes provide these needed information that will enable these lecturers manage work-related stress.

Occupational safety is the practice of safety at work place to reduce accident and increase work productivity and safe environment. Occupational safety education is a structured programme for enlightenment, awareness, creating of safety consciousness and identification of unsafe and safe act and conditions in all sectors of life. According to the Institute of Safety Professionals of Nigeria "ISPON" (2012), occupational safety education is the science of designing, implementing and evaluating comprehensive health and safety programmes that maintain and enhance employee's health, improve safety and increase productivity in the work place. Occupational health and safety is the discipline concerned with preserving and protecting human resources in the workplace. Similarly, occupational health and safety as the ability of a worker to perform at an optimum level of well-being at a job as reflected in terms of productivity, efficiency, and employment longevity.

Occupational safety education programmes are designed to inform and create awareness on unsafe acts and raise safety consciousness in individuals of different categories. Occupational safety cuts across so many disciplines and has programmes such as the need for occupational safety education, in health, unsafe act auditing, and good housekeeping, etc. Health is a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity (WHO, 1948). This will help lecturers stay healthy, by being educated on necessary health improvement programmes, exercises to keep fit and burn sugar and cholesterol. Unsafe act auditing, is a procedure design which enables an organization or individual to identify unsafe practices of employees in the organization (ISPON, 2012). Unsafe act audit will increase lecturers' safety awareness. This will reduce significantly the potentials for accidents in the individual's working habits. Good housekeeping, is not just cleanliness, it includes keeping documents, files, work areas neat and orderly, maintaining appliances and floors free of slip and trip hazards, and removing of waste materials (e.g., paper, cardboard) and other fire hazards from work areas (ISPON, 2012). It is keeping everything in the place where they are supposed to be. This will help lecturers in organizing and planning lectures, meetings and other day to day schedule, thereby eliminating stress.

These occupational safety education programmes are designed to ensure safe working environments and a reduced stress working environment or condition. Therefore, managing work-related stress among lecturers depends on the acquisition of knowledge from these occupational safety education programmes. These programmes are of immense benefit to all and sundry, but the researchers also observed that occupational safety programmes are mostly provided for staff of oil multinational companies, construction companies, industries and factories. This is because of the recognition of incidents that have caused injuries, deaths and destruction of properties in these sectors. Lecturers have been saddled with too much academic work and have lost the ability to identify and manage work-related risk and hazards which causes work-related stress and associated ailments. Lots of sicknesses and deaths have been observed among academic staff in University of Port Harcourt which is not

unconnected with work overload (Osaat&Ekechukwu, 2017). This may also be the case of Ignatius Ajuru University of Education, Rivers State University and other public universities in Nigeria. Sindhu (2014) opined that stress is an inevitable and unavoidable component of life due to complexities and competitiveness in living standards. In the same line, Sindhu (2014) opined that in this modern era job stress has become a part of life and has received a considerable attention in recent years. This may be connected with why lecturers in public universities in Rivers State suffer sicknesses centered on work-related stress such as hypertension, stroke, cardiac arrest and other related ailments which have caused notable deaths in the university community. It is against this background that this study examined occupational safety education programmes for managing work-related stress among adult education lecturers in public universities in Rivers State.

Statement of the Problem

University education in Nigeria is perceived by Nigerian youths and parents as a pathway to greener pasture and this puts a lot of responsibilities on these institutions and their staff. Lecturers are responsible for the quality of education dispensed per time in their universities. In public universities in Rivers State, lecturers are saddled with excessive responsibilities which are tasking and stressful. Recently, it has been observed by the researchers that most lecturers in these universities are over saddled with too many work responsibilities which makes it difficult for them to perform at their best. The recruitment of lecturers does not measure up with the increasing number of students' enrollment in the universities. Hence lecturers are observed to have heavy workload in public universities in Rivers State. Lecturers are allocated with too many courses to teach, expected to publish research articles in reputable journals for promotion, write books and participate in conferences, workshops, seminar, supervise students projects from undergraduate to postgraduate and also handle administrative positions etc.

This work overload puts lecturers under a lot of stress so they are unable to give in their best in teaching, paper writing, writing of books, journal publications, attending conferences, carrying out quality research and community service responsibilities. Lecturing profession is one profession that requires working from the office to home then to office again. This has affected their teaching performance and most times some of these lecturers fall ill and die out of work-related stress and leave their families behind. Universities have recorded cases where lecturers collapse on duty, get home after a stressful work day, slum and die. The question is, will the provision of occupational safety education programmes help lecturers in adult education department in public universities in Rivers State manage work-related stress? Providing answers to this question is the problem of this study.

Purpose of the Study

The purpose of this study was to examine occupational safety education programmes for managing work-related stress among Adult Education lecturers in public universities in Rivers State. Specifically, the study sought to achieve the following objectives:

1. Find out the extent to which occupational safety education on health helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State.
2. Determine the extent to which occupational safety education on unsafe act auditing helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State.
3. Determine the extent to which occupational safety education on good housekeeping helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State

Research Questions

The following research questions guided the study:

1. To what extent does occupational safety education on health helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State?
2. To what extent does occupational safety education on unsafe act audit helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State?

Hypotheses

- Ho₁. There is no significant difference in the mean ratings of lecturers in federal and state public universities on the extent to which occupational safety education on health helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State.
- Ho₂. There is no significant difference in the mean ratings of lecturers in federal and state public universities on the extent to which occupational safety education on unsafe act auditing helps in managing work-related stress among Adult Education lecturers in public

universities in Rivers State.

H₀₃. To what extent does occupational safety education on good housekeeping helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State?

Method

The study adopted the descriptive survey research design with a population of (45) Adult Education lecturers in public universities in Rivers State. This comprises of Twenty five (25) lecturers from federal university in Rivers State (University of Port Harcourt) and twenty (20) lecturers from State universities of Rivers State (Rivers State University and Ignatius Ajuru University of Education) making a total of forty five (45). The entire population of this study was taken as census without sampling due to the manageable size of the population. The instrument for data collection in this study was a self-developed questionnaire titled "Occupational Safety Education Programmes for Managing Work-Related Stress Questionnaire (OSEPMWRSQ)". The instrument was validated by two (2) experts from Measurement and Evaluation. The instrument was determined using the Cronbach Alpha statistics for a measure of internal consistency of the instrument. Research questions were answered using mean and standard deviation. Decision rule for the research questions was based on modified four point rating scale. Mean value less than 2.50 (<2.50) was considered to be low extent (LE) while item with mean value of 2.50 and above (≥ 2.50) was considered to be high extent (HE), while the hypotheses were tested using Z-test at 0.05 level of significance.

Results

Research Question 1: To what extent does occupational safety education on health helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State?

Table 1: Mean Ratings of Lecturers in Federal and State Universities on the Extent to which Occupational Safety Education on Health Helps in Managing Work-Related Stress Among Adult Education Lecturers in Public Universities in Rivers State.

S/N	Items	Lecturers in Federal Universities N=25			Lecturers in State Universities N=20			Universities
		\bar{X}	SD	RMK	\bar{X}	SD	RMK	
1.	Educating lecturers on the need for regular medical checkups helps them diagnose possible health challenges that could be a result of work related stress	3.94	.86	HE	3.52	.81	HE	
2.	Creating awareness no proper nutrition and good eating habits help lecturers manage stress better	3.17	.90	HE	3.14	.89	HE	
3.	Educating lectures on the need for regular exercises encourages lecturers to engage in physical exercises and this manages the effect of work related stress on them	3.18	.83	HE	3.21	1.22	HE	
4.	Awareness on the need for good sleeping habits makes lecturers get enough sleep which helps them cope with work-related stress	3.41	.82	HE	3.40	.76	HE	
5.	Creating awareness on the importance of vacations and leisure activities encourages more lecturers to take some time off work to recuperate and this helps them deal with work- related stress	3.16	.83	HE	3.30	1.05	HE	
6.	Health education programmes discourages self medication among lecturers and make them seek early medical attention when they have stress related ailments	3.10	.80	HE	3.28	.60	HE	
7.	Health education programmes helps lecturers indulge in the habit of drinking lots of water which helps them manage stress better	3.15	.77	HE	2.54	.56	HE	
Grand mean		3.30		HE	3.20		HE	

The analyzed data on Table 1 above for research question 1, revealed that all the items 1, 2, 3, 4, 5, 6 and 7 had mean scores 3.94, 3.17, 3.18, 3.41, 3.16, 3.10 and 3.15 with standard deviation .86, .90, .83, .82, .83, .80 and .77 for lecturers in federal universities and 3.52, 3.14, 3.21, 3.40,

3.30, 3.28 and 2.54 with standard deviation .81, .89, 1.22, .76, 1.05, .60 and .56 for lecturers in state universities and revealed the extent occupational safety education on health helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State. However, with grand mean scores of 3.30 and 3.20 for lecturers in federal and State universities respectively, the answer to research question one reveals that occupational safety education on health helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State to a high extent.

Research Question 2: To what extent does occupational safety education on unsafe act auditing helps in managing work-related stress among lecturers in Adult Education Departments in public universities in Rivers State?

Table 2: Mean Ratings of Lecturers in Federal and State Universities on the Extent to which Occupational Safety Education on Unsafe Act Auditing Helps in Managing Work-Related Stress Among Adult Education Lecturers in Public Universities in Rivers State.

S/N	Item	Lecturers in Federal Universities N=25			Lecturers in State Universities N=20		
		\bar{X}	SD	RMK	\bar{X}	SD	RMK
8.	Education on unsafe act auditing teaches lecturers to identify potential acts that can predispose them to work stress so they can avoid such acts	2.77	1.37	HE	2.93	1.27	HE
9.	Trainings of lecturers to avoid sitting on their computer for too long without appropriate shield to avoid stressing the eyes	2.63	1.32	HE	3.98	.87	HE
10.	Educating lecturers on unsafe acts in their work place makes them avoid teaching too many courses a day without taking breaks as this can trigger stress	2.94	1.18	HE	3.11	.83	HE
11.	Proper trainings of lecturers would change the habit of skipping meals while at work which exposes them to more stress	2.63	1.28	HE	2.83	1.03	HE
12.	Educating lectures on unsafe act discourages the habit of piling up work which puts them under pressure when there is deadline and exposes them to stress	3.02	.93	HE	2.76	1.10	HE
13.	Education lecturers on unsafe act auditing helps them learn to delegate responsibilities so that they are not under too much stress	3.25	.75	HE	3.18	0.58	HE
14.	Educating lecturers on fact that sitting down on a chair for long hours is an unsafe act, helps them take periodic walk to manage stress when they are in the office	3.52	.68	HE	3.71	0.81	HE
	Grand mean	2.96		HE	3.21		HE

The analyzed data from table 2 revealed that all the items 8, 9, 10, 11, 12, 13 and 14 had mean scores 2.77, 2.63, 2.94, 2.63, 3.02, 3.25 and 3.52 with standard deviation 1.37, 1.32, 1.18, 1.28, .93, .75 and .68 for lecturers in federal universities and 2.93, 3.98, 3.11, 2.83, 2.76, 3.18 and 3.71 with standard deviation 1.27, .87, .83, 1.03, 1.10, .58 and .81 for lecturers in state universities and revealed the extent occupational safety education on unsafe act auditing helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State. However, with grand mean scores of 2.96 and 3.21 for lecturers in federal and State universities respectively, the answer to research question two reveals that occupational safety education on unsafe act auditing helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State to a high extent.

Research Question 3: To what extent does occupational safety education on good housekeeping helps in managing work-related stress among lecturers in Adult Education Departments in public universities in Rivers State?

Table 3: Mean Ratings of Lecturers in Federal and State Universities on the Extent to which Occupational Safety Education on Good Housekeeping Helps in Managing Work-Related Stress Among Adult Education Lecturers in Public Universities in Rivers State.

S/N	Item	Lecturers in Federal Universities N=25			Lecturers in State Universities N=20		
		\bar{X}	SD	RMK	\bar{X}	SD	RMK
22.	Educating lecturers on good housekeeping helps them to appreciate the need for proper filing of their documents so they are not stressed when looking for documents	2.88	1.29	HE	3.29	.78	HE
23.	Education on how to prepare daily schedule helps lecturers manage their daily work activities and avoid stress	3.58	1.15	HE	3.48	1.03	HE
24.	Teaching lecturers how to designate days for attending to students and other activities helps them manage work-related stress better	2.63	.69	HE	3.42	.65	HE
25.	Educating lecturers on cleanliness and orderliness discourages habits of unkempt offices which exposes lecturers to work-related stress	3.01	.90	HE	3.07	.87	HE
26.	Education on good housekeeping helps lecturers know how to manage electrical installations in their offices to avoid accidents that may cause stress	2.90	1.06	HE	2.68	.62	HE
27.	Awareness on proper time management helps lecturers allot time to their daily activities to avoid stress			HE			HE
28.	Educating lecturers on good housekeeping encourages maintaining halls and floors free of slip and trip hazards, and removing of waste materials to avoid work-related stress.	3.10	.60	HE	2.98	.72	HE
	Grand mean	3.54	.66	HE	3.81	.78	HE

Data on table 3 shows that all the items 22, 23, 24, 25, 26, 27 and 28 had mean scores of 2.88, 3.58, 2.63, 3.01, 2.90, 3.10 and 3.54 with standard deviation 1.29, 1.15, .69, .90, 1.06, .60 and .66 for lecturers in federal universities and 3.29, 3.48, 3.42, 3.07, 2.68, 2.98 and 3.81 with standard deviation .78, 1.03, .65, .87, .62, .72 and .78 for lecturers in state universities. The foregoing revealed the extent occupational safety education on good housekeeping helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State. However, with grand mean scores of 3.09 and 3.25 for lecturers in federal and State universities respectively, the answer to research question three reveals that occupational safety education on good housekeeping helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State to a high extent.

Test of Hypotheses

H_{01} : There is no significant difference in the mean ratings of lecturers in federal and state universities on the extent to which occupational safety education on health helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State.

Table 4: Z-test Analysis of Difference in the Mean Ratings of Lecturers in Federal and State Universities on the Extent to which Occupational Safety Education on Health Helps in Managing Work-Related Stress Among Adult Education Lecturers in Public Universities in Rivers State.

Respondents	N	\bar{X}	S.D	DF	LS	z-cal	z-critical	Decision
Lecturers in Federal Universities	25	3.30	0.83	43	0.05	0.39	± 1.96	Failed to Reject
Lecturers in State Universities	20	3.20	0.84					

Data on Table 4 above revealed z-test analysis of difference between the mean ratings of lecturers in federal and state universities on the extent to which occupational safety education on health helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State. At 0.05 level of significance and 43 degree of freedom, the z-calculated value was 0.39 which was less than the z-critical value of ± 1.96 , therefore the null hypothesis was accepted; which states that there is no significant difference between the mean ratings of lecturers in federal and state universities on the extent to which occupational safety education on health helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State.

Ho₂: There is no significant difference in the mean ratings of lecturers in federal and state universities on the extent to which occupational safety education on unsafe act auditing helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State.

Table 5: Z-test Analysis of Difference in the Mean Ratings of Lecturers in Federal and State Universities on the Extent to which Occupational Safety Education on Unsafe Act Auditing in Managing Work-Related Stress Among Adult Education Lecturers in Public Universities in Rivers State.

Respondents	N	\bar{X}	SD	DF	LS	z-cal	z-cri	Decision
Lecturers in Federal Universities	25	2.96	1.07	43	0.05	-0.54	± 1.96	Failed to Reject
Lecturers in State Universities	20	3.21	0.93					

Data on Table 5 above shows a z-test analysis of difference between the mean ratings of lecturers in federal and state universities on the extent to which occupational safety education on unsafe act audit helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State. At 0.05 level of significance and 43 degree of freedom, the z-calculated value was -0.54 which was less than the z-critical value of ± 1.96 , therefore the null hypothesis was accepted, which states that there is no significant difference between the mean ratings of lecturers in federal and state universities on the extent to which occupational safety education on unsafe act auditing helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State.

Ho₃: There is no significant difference in the mean ratings of lecturers in federal and state universities on the extent to which occupational safety education on good housekeeping helps in managing work-related stress among lecturers in Adult Education Departments in public universities in Rivers State.

Table 6: Z-test Analysis of Difference in the Mean Ratings of Lecturers in Federal and State Universities on the Extent to which Occupational Safety Education on Good Housekeeping in Managing Work-Related Stress Among Adult Education Lecturers in Public Universities in Rivers State.

Respondents	N	\bar{X}	S.D	DF	LS	z-cal	z-cri	Decision
Lecturers in Federal Universities	25	3.09	0.91	43	0.05	-0.38	± 1.96	Failed to Reject
Lecturers in State Universities	20	3.25	0.78					

Data on Table 4.9 above shows a z-test analysis of difference between the mean ratings of lecturers in federal and state universities on the extent to which occupational safety education on good housekeeping helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State. At 0.05 level of significance and 43 degree of freedom, the z-calculated value was -0.38 which was less than the z-critical value of ± 1.96 , therefore the null hypothesis was accepted, which states that there is no significant difference between the mean ratings of lecturers in federal and state universities on the extent to which occupational safety education on good housekeeping helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State.

Discussion of Findings

The findings of the study on research question one clearly revealed that occupational safety education on health helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State to a high extent with ground mean value of 3.30 and 3.20 for federal and state Adult Education lecturers respectively. From the analyzed table, it was revealed that educating lecturers on the need for regular medical checkups enable lecturers diagnose possible health challenges and manage them on time, creating awareness no proper nutrition and good eating habits help lecturers eat right to build their immune system and manage stress better, educating lectures on the need for regular exercises encourages lecturers to engage in physical exercises among others. The corresponding hypothesis one on table 4 showed no significant difference between the mean ratings of lecturers in federal and state universities on the extent to which occupational safety education on health helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State with z-calculated value of 0.39 which was less than the z-critical value ± 1.96 . This finding is in consonance with the findings of Dembe, et al (2014), which revealed that job schedules with long working hours are more risky merely because they are concentrated in inherently hazardous industries or occupations, or because people working long hours spend more total time “at risk” for a work injury. Strategies to prevent work injuries should consider changes in scheduling practices, job redesign, and health protection programmes for people working in jobs involving overtime and extended hours.

The findings of the study on research question two clearly revealed that occupational safety education on unsafe act auditing helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State to a high extent with ground mean value of 2.96 and 3.21 for federal and state Adult Education lecturers respectively. From the analyzed table, it was revealed that education on unsafe act auditing teaches lecturers to identify potential acts that can predispose them to work stress, through trainings lecturers can avoid sitting on their computer for too long, educating lecturers on unsafe acts in their work place makes them avoid teaching too many courses a day, through proper trainings lecturers would change the habit of starving themselves while at work, educating lectures on unsafe act auditing discourages the habit of piling up work, and educating lecturers on fact that sitting down on a chair for long hours is an unsafe act, taking periodic walk when they are in the office helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State. The corresponding hypothesis two on table 5 showed that there is no significant difference between the mean ratings of lecturers in federal and state universities on the extent to which occupational safety education on unsafe act auditing helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State with z-calculated value of -0.54 which was less than the z-critical value ± 1.96 . This finding is in agreement with findings of Usoro and Etuk (2016) which showed that workload related stress significantly influence the job effectiveness of lecturers in terms of publication, community service and teaching effectiveness.

The findings of the study on research question four revealed that occupational safety education on good housekeeping helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State to a high extent with grand mean value of 3.09 and 3.25 for federal and state Adult Education lecturers respectively. From the analyzed table, it was revealed that educating lecturers on good housekeeping helps them to appreciate the need for proper filing of their documents, education on how to prepare daily schedule helps lecturers manage their daily work activities and avoid stress, teaching lecturers how to designate days for attending to students and other activities helps them manage work-related stress better, educating lecturers on cleanliness and orderliness discourages habits of unkempt offices and classrooms, education on good housekeeping helps lecturers know how to manage electrical installations in their offices, awareness on proper time management helps lecturers allot time to their daily activities to avoid stress and educating lecturers on good housekeeping encourages maintaining halls and floors free of slip and trip hazards, and removing of waste materials helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State. The corresponding hypothesis three on Table 6 showed a significant difference between the mean ratings of lecturers in federal and state universities on the extent to which occupational safety education on good housekeeping helps in managing work-related stress among Adult Education lecturers in public universities in Rivers State with z-calculated value of -0.38 which was less than the z-critical value ± 1.96 . This finding is in consonance with Ashuro et al. (2021) revealed that modifiable risk factors such as the use of personal protective equipment (PPE), lack of safety training, and gender were the major associated factors with injury. Therefore, a continuous safety training and awareness creation program on risk-taking behavior should be given to construction workers.

Conclusion

Based on the findings, it was concluded that Adult Education lecturers in public universities in Rivers State experience work-related stress. This work-related stress is seen in the areas of supervising large number of undergraduate, teaching of many courses, student projects and post-graduate dissertation, theses and added administrative work, community service responsibilities, attending of conferences, seminars and workshop coupled with writing journal papers for publication

Recommendations

1. The university authorities in collaboration with external medical centers should organize health seminars, conferences and workshops on the need for regular medical checkups, proper nutrition and eating habits, regular exercises, good sleeping habits, importance of vacations and discourage self medication. This will help lecturers manage work-related stress.

2. The management of these universities should establish a safety unit, safety staff should be employed to the universities as to monitor and evaluate, audit unsafe acts and conditions, guide the universities properly on safety practice and the unit will also train lecturers on certain act that has potential to cause stress, illness and measures to avoid them. This will help lecturers manage work-related stress.
3. The universities in Rivers State and other parts of Nigeria should partner with the institute of safety professionals of Nigeria (ISPON) for periodic safety courses for lecturers, such as good housekeeping, defensive driving, swimming/water survival, fire fighting, basic first aid and use of personal protective equipment, etc. This will help lecturers manage work-related stress.

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