Effect of Job Crafting Intervention Programme on Occupational Stress and Job Performance of Electrical Technologists and Technical Instructors in Universities in South-West, Nigeria

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Abstract

The study determined the effect of job crafting intervention programme on occupational stress and job performance of Electrical Technologists and Technical Instructors in Universities in South-West, Nigeria. Two research questions guided the study while the hypotheses formulated were tested at 0.05 level of significance. A quasi-experimental design involving pre-test and post-test assessments was employed. The population for the study was 50 Electrical/Electronic Technologists and Technical Instructors. Participants were divided into intervention and control groups, with the former receiving structured job crafting training over a period of six weeks. Data were collected using a validated instrument measuring occupational stress and job performance of Electrical/Electronic Technologists and Technical Instructors. The internal consistency of the questionnaire items was determined using Cronbach alpha reliability method and reliability coefficient value of 0.89 was obtained. The results indicate that the job crafting intervention significantly reduced occupational stress and enhanced job performance among the Electrical Technologists and Technical Instructors. Recommendations include that Government agencies and Nigerian university administrators should organise seminar or workshops for electrical/electronic technologists and technical instructors using job crafting intervention programme. Higher institutions should encourage the use of job crafting intervention programme to organize seminars or workshops for technical staff regularly in their various institutions.

Keywords: job crafting, intervention programme, occupational stress, job performance, Technologists, Technical Instructors, universities

Introduction

University is a degree awarding institution established for the development of individuals and the society at large. A university is a higher learning institution that brings men and women to a high level of intellectual development in the arts and science, and in the traditional professional disciplines and promotes high-level research (Sintayehu & Hussien, 2021). University as a tertiary institution admits, trains and graduates students after fulfilling the requirements for graduation. During the course of study, students are required to major in a field of study which will then form their career once they graduate. Students are awarded academic degree after going through an undergraduate or a postgraduate educational programme by the respective universities.

The National Universities Commission (NUC) of Nigeria is the government agency saddled with the responsibility of promoting quality University education in Nigeria. The commission is responsible for approving all academic programmes run in Nigerian Universities and accrediting and approving the establishment of all higher educational institutions offering degree programmes. Nigerian University education includes both public and private Universities (Jacob, Jegede & Musa, 2021). The public Universities are run by both Federal and State governments while the private universities are owned by different religious bodies, individuals and

organizations. The Nigerian University workforce is classified into the academic staff which comprises of the Lecturers and the non-academic staff which comprises of the administrative staff, Librarian, Technologists, Technical Instructors and others.

Technologists and Technical Instructors in the Nigeria Universities work in a variety of Departments including Agricultural, Biological, Educational, Engineering, Medical, Pharmaceutical, Vocational and Technical Education, among others and are positioned in a specific area of their specialization in the University. This study however, is focused on the Electrical/Electronic Technologists and Technical Instructors within Vocational and Technical Education programme. Electrical/Electronic Technologists and Technical Instructors provide appropriate scientific knowledge and technological-skills needed to enable students in training to transit successfully into employment or become self-reliant in life. It has been said that the working condition and the operational structure of work for most Electrical/Electronic Technologists and Technical Instructors in universities, particularly in Southwest Nigeria, due to high population disposes them to unnecessary rigors, demands, rigidities and stressors (Ogbuanya&Salawu, 2024; Ogbuanya&Yekinni, 2020; Yekinni, 2016). Such stressors that emanate from workplaces are commonly categorized under occupational stress (Jacobs, 2023; Shen & Slater, 2021; Aduma et al., 2022; Okeke et al., 2022; Ogbuanya et al., 2017) and this could reduce the job performance of the Electrical/Electronic Technologists and Technical Instructors in this region.

In today's dynamic and competitive work environment, Nigerian Universitiesare constantly seeking for strategies to reduce occupational stress and enhance job performance. Also, Occupational stress is a significant concern for Electrical/Electronic Technologists and Technical Instructors in their profession (Hendy, Can & Black, 2019), as it impedes their potentials in the field. Occupational stress or job stress is a type of strain one experiences as a result of unfavourable environmental conditions in an occupation (Maashin, Ogbuanya & Bakare, 2022). It is a condition that affects the emotions, thought processes, and the thinking process of employees. Occupational stress could be in form of workload stress (Okiridu & Godspower, 2021), role ambiguity (Amoo, 2018), role conflict (Melki, Bouzid & Mrayeh, 2020), interpersonal conflict (Mesuwini & Mokoena, 2023), job insecurity, work-life imbalance (Gonzaga, 2019), workplace bullying and harassment, lack of control, job dissatisfaction with aspects of one's job, such as pay, recognition, advancement opportunities, and psychological stress (Dikgare, 2020).

Occupational stress has been associated with job dissatisfaction, impaired work performance, teaching below standard, ill-health and poor psychological well-being, poor interpersonal relationships, reduced employee engagement and organizational commitment, absenteeism, and high staff turnover (Dorenkamp & Weiß, 2018). Occupational stress is acute and chronic in nature (Bester, 2023) and could have a negative impact on the productivity of both Electrical/Electronic Technologists and Technical Instructors. It reduces job performance (Akah, Owan, Aduma, Onyenweaku, Olofu, Alawa & Usoro, 2022), reasoning, innovation, and invention, and distorts time for the completion of tasks among amongst Electrical/Electronic Technologists and Technicians (Omeje et al, 2023). It further reduces the level of job commitment and dedication, and affects the emotional dispositions of the Technologists and Instructors (Agu, Odo, Ede, Ezema, Omeke, Chukwuji, Diara&Manafa, 2018). According to Prasad, Vaidya & Mangipudi

(2020), occupational stress has noticeable functional, emotional and behavioural effect on performance of employees across the globe, irrespective of the organization and type of employment. It is apparent that occupational stress, may induce role ambiguity, overwork, role conflict, and time pressure (Samuels, 2022), which evidently could reduce the job performance of Electrical/Electronic Technologists and Technical Instructors in universities in south-west, Nigeria.

Job performance is a concept that scholars have viewed as the degree to which a combination of duties (such as teaching, research and community service) is performed by academic staff of universities (Owan, Odigwe, Okon, Duruamaku-Dim, Ubi, Emanghe & Bassey, 2022). Job performance has also been defined as the association between teaching features and educational success in the classroom (Okoi & Odigwe, 2018). Given the charge committed to Electrical/Electronic Technologists and Technical Instructors to equip individuals with knowledge, skills and attitudes required for effective management and maintenance of electrical and electronic equipment and gadgets such as radio, television, computers, among others, their importance remains unmatched in the society (Bakare, Omeje, Ariyo, Nwaodo, Ijeoma, Ogunmilade & Olaoye, 2020). The importance of job performance of Electrical/Electronic Technologists and Technical Instructors cannot be overemphasized because of the lingering and far-reaching effect it may have on the educational outcome of students and the nation.

Job crafting refers to self-initiated, proactive strategies to change work characteristics to better align one's job with personal needs, goals, and skills (Knight, Tims, Gawke & Parker, 2021; Döbler, Emmermacher, Richter-Killenberg, Nowak & Wegge, 2022) which includes seeking support from colleagues, and asking for feedback. Job crafting is crucial as it enables both the Electrical/Electronic Technologists and Technical Instructors to adapt, engage, develop skills, build resilience, foster innovation, integrate work and personal life, and promote retention. Many studies have shown that, by proactively crafting aspects of ones work in today's rapid technological evolving era, individuals experience improved well-being, work engagement, and performance (Lazazzara, Tims & De Gennaro, 2020; Lichtenthaler&Fischbach, 2018; Zhang & Parker, 2019). This type of changing work design is therefore a bottom-up approach by which individuals tailor their jobs to meet their own needs, goals, and skills. Thomas, Thomas and Du Plessis, (2020) posited that Job-Crafting interventions have the potential to enable employees to proactively improve their work engagement and performance.

There are three types of job crafting according Zhang and Liu (2021) namely; task crafting (changing the type or amount of work done), relational crafting (being cautious about whom you work with at work), and cognitive crafting (changing your views on work tasks in order to make them more meaningful to you). Task crafting refers to the voluntary modification of job tasks or responsibilities to align with individual preferences and strengths (Wallinet al., 2022). Relational crafting focuses on shaping social interactions within the workplace. It involves building and nurturing relationships with colleagues, clients, or supervisors to enhance collaboration, support, and interpersonal dynamics (Geldenhuys, Bakker & Demerouti, 2021; Tims& Parkers, 2020). Cognitive crafting entails the reframing of one's perception or interpretation of job roles and responsibilities, allowing individuals to find meaning and purpose in their work and adopt a positive mindset (Wallin, Nokelainen, & Kira, 2022; Hommelhoff, Weseler & Niessen, 2021). It involves the reconfiguration of job

elements to better suit individual preferences, strengths, and motivations, ultimately leading to increased engagement, job satisfaction, and productivity (Guo & Hou, 2022).

Job crafting intervention programme is defined as any activity designed to teach employees how to optimize their work environment and improve the fit between their job and their personal needs, abilities, and passions, so as to result in higher work engagement and improved performance(Demerouti et al., 2015). When job crafting is implemented via an intervention over a period of time, it can help boost employee autonomy, create a climate for innovation, enhance creativity, and improve job performance(Hu et al., 2020; Thomas et al., 2020).Since the introduction and actual conceptualization of the phrase job crafting intervention, several studies have been carried out on its potentialstoenhancing work related outcomes.Recent studies have shown evidences on how individuals and employees in educational institutions have been helped to have better work experiences while crafting their job, by introducing the job crafting intervention programme (Jakada et al., 2023; Manzanares et al., 2021). This goes to show the possibility of observing a similar outcome in this present study.

Hence, the general purpose of this study was to investigate the effect of job crafting intervention programme on the occupational stress, job performance and creativity of Electrical/Electronic Technologists and Technical Instructors in South-West, Nigeria. Specifically, the study sought to determine:

1. effect of job crafting intervention programme in reducing the occupational stress of Electrical/Electronic Technologists and Technical Instructors.
2. effect of job crafting intervention programme on the job performance of Electrical/Electronic Technologists and Technical Instructors.

Research Questions

The following research questions guided the study:

1. What is the effect of job crafting intervention programme in reducing the occupational stress of Electrical/Electronic Technologists and Technical Instructors?
2. What is the effect of job crafting intervention programme on job performance of Electrical/Electronic Technologists and Technical Instructors?

Hypotheses

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

1. There is no significant effect of job crafting intervention programme on the occupational stress of Electrical/Electronic Technologist and Technical Instructors.
2. There is no significant effect of job crafting intervention programme on the job performance of Electrical/Electronic Technologist and Technical Instructors.

Methodology

Design of the Study

The study adopted a quasi experimental design. As a result, the following graphic serves as a symbolic depiction of the chosen research design:

Experimental Group O_1 X O_2
Control Group O_1 O_2

Where:

O_1 = Pretest
O_2 = Post-test
X = Intervention for the Experimental Group

Area of the Study

The study was conducted in Southwest Nigeria, which comprises of six States, namely; Lagos, Ogun, Oyo, Osun, Ondo, and Ekiti State. Southwest Nigeria is home to several universities that offer Electrical/Electronic Technology education programme with adequate material and human resources like Electrical/Electronic Technologists, and Technical Instructors who could help facilitate the conduct of the experiment. Southwest Nigeria is a region that hosts a growing industrial sector, including manufacturing, telecommunications, and energy, which relies heavily on skilled professionals in Electrical/Electronic technology.

Population for the Study

The population for this study was 50 Electrical/Electronic Technologists and Technical Instructors in seven universities in Southwest Nigeria, known for offering TVET programmes, namely; Adekunle Ajasin University Akungba Akoko (AAU), Ekiti State University (EKSU), Tai Solarin University of Education (TASUED), University of Lagos (UNILAG), Yaba College of Technology, Federal College of Education (Technical), Akoka and Lagos State University of Education, Otto Ijanikin. The population of the study is obtained directly from various Secretary and Heads of Department in each participating university under the study as indicated. The entire population was used for the study therefore there was no sampling.

Eligibility Criteria

Only Electrical/Electronic Technologists and Technical Instructors in the selected universities in Southwest, were deemed eligible for this study. On one hand, the eligibility or inclusion criteria was based on (a) Technologists and Instructors' willingness to partake/participate in the study, (b) not being joined to or in any other intervention during the conduction of this study and (c) being readily available for the study among others. In each of the participating universities, the Electrical/Electronic Technologists and Technical Instructors who partook and indicated they do not practice job crafting in their career were allocated to Study Group.

Instrument for Data Collection

The instrument for data collection in this study was a structured questionnaire, which titled Occupational stress and Job performance Questionnaire. The instruments provided several demographic information of participants and specific pertinent information sought. Job Crafting Intervention (JCI) scale was adapted from Slemp and Vella-Brodrick (2013). Occupational Stress Scale (OSS) was adapted from Fimian (1984), comprising of 20 items. The benchmark for the OSS is 2.5 such that above it implies high occupational stress and below it, low occupational stress. The OSS is rated on a modified four-point scale, with responses Strongly Disagree (SD) =1, Disagree (D) = 2, Agree (A)= 3, and Strongly Agree (SA) = 4. Job Performance Scale (JPS) is adapted from Na-Nan et al., (2018), and it is comprising 18 items. The benchmark for the JPS is 2.5 such that above it implies high job performance and below it, low performance of job. The JPS was rated on a modified four-point scale, with responses Strongly Disagree (SD) =1, Disagree (D) = 2, Agree (A)= 3, and Strongly Agree (SA) = 4.

JCI Programme Manual

The JCI programme manual was adapted from the Costantini et al., (2022). It covered the time frame, topic of discussion, session objectives, session activities, and job crafting techniques. The time frame is the dedicated time within which a particular task and topic could be carried out or discussed.

The topic shows the topic(s) to be discussed under an allocated time frame. Session objectives sets forth the specific tasks to be covered. Session activities display a flow and steps taken in order to achieve the setout objectives. The job crafting techniques captures the particular behavioural JCI manual for exploring the effect of job crafting intervention based on the theory of planned behaviour job crafting dosage administered. This was to shed light on the psychological processes occurring during job crafting interventions, which allows testing if the intervention design is effective and why, contributing to detail the psychological mechanisms of intervention effectiveness. Besides, by investigating the link between a theory-driven intervention design and Electrical/Electronic Technologists and Technical Instructors' psychological states at work, this study deepens knowledge on whether such interventions could effectively reduce occupational stress and increase job performanceof Electrical/Electronic Technologists and Technical Instructors.

Validation of the Instrument and Job Crafting Intervention programme Manual

The instruments used in collecting the study data were face validated by Experts in relevant fields. Among the Experts, two were from Psychology related fields of educational foundations department and three others were from Industrial Technical Education Department, all in the University of Nigeria, Nsukka. These Experts were also requested to carefully review the intervention treatment manual in light of the following criteria: goals, activities, language clarity, research questions and hypotheses, and strict adherence to the study's objectives, goals, activities, strategies, and techniques. The intervention manual and the instrument were improved by incorporating the suggestions and criticisms made by the experts.

Reliability of the Instrument

The internal consistency of the questionnaire items was determined using Cronbach alpha reliability method. Copies of the questionnaire was administered on Electrical/Electronic Technologists and Instructors in Enugu state university of science and technology, University of Nigeria, Nsukka and Enugu State college of education (Technical), Enugu, Enugu State. These institutions are considered outside the scope of the study but share similar characteristics and offer the same course of study.

Experimental Procedure

This study involved a treatment group (experimental) and a control group. Both groups were pretested using measurement scales such as OSS and JPS. The experimental procedure is established using the quasi-experimental approach. Thereafter, only the experimental group received the JCI, the control group did not receive any treatment. Subsequently, the JC treatment was administered, which spanned a period of 4 weeks with 8 sessions, where each sessionspanned 1 hour. The study participants who were in the treatment and control groups completed the OSS and JPSat the post-test exercise. The researcher collaborated with the Heads of Departments of the participating institutions to permit participant's attendance in group sessions taking place within the regular school hours, to make room for a temporary alteration of academic activities. Upon completion of the JC intervention programme, participants completed the OSS and JPSfor the post-test exercise.

Method of Data Collection

Two research assistants helped to administer the copies of the questionnaire to experimental and control groups, and collected data for the study while three intervention Experts conducted intervention sessions and assessed the process. The Researcher briefed the research assistants and intervention Experts about their roles in the experiment.

During training, the Researcherembarked on unplanned visit to each institution to see the process of the experiment and gave necessary advice that could raise the standard of the experiment. After the experiment, the Research Assistantscollected the copies of the questionnaire administered from the respondents, arrange, collated and organized them and handed them over to the Researcher for further actions to be taken for the realization of the objectives of the study

Method of Data Analysis

Data collected from the two groups, experimental and control was analyzed using Mean to answer research questions while analysis of covariance (ANCOVA) was used to test the null hypotheses formulated at 0.05 level of significance. Real limit of numbers was used to interpret the data in order to perfectly answer all the research questions. In taking the decision for the hypothesis, the significant level was based on p -value of 0.05 such that p - value less than or equal to 0.05, depicts rejection. However, test with p -value greater than 0.05 implies acceptance of null hypothesis relative to the test.

Results

Data for answering research questions and testing hypotheses are presented in Table 1-3 below:

Research Question 1

What is the effect of job crafting intervention programme in reducing occupational stress of Electrical/Electronic Technologists and Technical Instructors?

Data for answering research question one are presented in Table 1

Table 1

Pretest and Posttest Mean Occupational Stress Scores of Electrical/Electronic Technologists and Technical Instructors Exposed to Job Crafting Intervention Programme and those not Exposed to the Intervention Programme

S/N	Variables	Assessments Classes	Groups	N	$\bar{X}$	SD	XD	SDD
1		Pretest	Experimental	26	35.12	4.52		
			Control	25	35.66	5.23		
	Work load	Posttest	Experimental	26	15.34	3.78	19.76	0.74
			Control	25	35.21	4.33	0.45	0.9
2		Pretest	Experimental	26	22.67	5.23		
	Behavioural		Control	25	21.10	3.67		
	symptoms	Posttest	Experimental	26	9.10	3.61	13.57	0.12
			Control	25	21.02	4.56	0.08	0.89
3		Pretest	Experimental	26	29.55	5.11		
	Organizational		Control	25	29.25	5.15		
	commitment	Posttest	Experimental	26	8.23	3.61	21.32	1.50
			Control	25	28.45	2.65	0.80	2.50
4		Pretest	Experimental	26	26.45	2.11		
			Control	25	24.51	3.12		
	Job satisfaction	Posttest	Experimental	26	7.55	1.56	18.90	0.55
			Control	25	23.55	2.55	0.96	2.16
5		Pretest	Experimental	26	27.37	3.67		
	Organizational		Control	25	27.88	2.33		
	security	Posttest	Experimental	26	8.45	1.75	18.92	1.92
			Control	25	27.01	3.27	0.87	0.94
6		Pretest	Experimental	26	27.21	2.90		
	Role conflict		Control	25	28.01	1.89		
	Relationship	Posttest	Experimental	26	8.10	2.13	19.11	0.54
			Control	25	27.89	3.92	0.12	2.03
7		Pretest	Experimental	26	27.64	2.36		
	Work-life balance		Control	25	25.81	1.89		
		Posttest	Experimental	26	7.23	2.01	20.23	3.32
			Control	25	24.98	3.89	0.83	2.00
8		Pretest	Experimental	26	27.64	5.33		

		Control	25	27.46	3.89		
Overall	Posttest	Experimental	26	9.14	5.32	18.50	0.01
		Control	25	26.87	4.56	0.59	0.67

Keys: *N = Number of Technologists and Instructors, SD = Standard Deviation, XD = Mean Difference, SDD = Standard Deviation Difference*

Datain Table 1 show the pre-test and posttest mean occupational stress scores of Electrical/Electronic Technologists and Technical Instructors exposed to job crafting intervention programme and those not exposed to the intervention programme. Table 1 reveals that after posttest, Electrical/Electronic Technologists and Technical Instructors in experimental group had a reduction in occupational stress as follows: work balance (X ±SD = 19.76± 0.74), behavioural symptoms (X ±SD = 13.57± 0.12), organizational commitment (X ±SD = 21.32 ±1.50), job satisfaction (X ±SD = 18.90± 0.55), organizational security (X ±SD = 18.92±1.92), role conflict relationship (X ±SD = 19.11±0.54), work-life balance (X ±SD = 20.23±3.32) and (X ±SD = 18.50± 0.01) for overall mean response. On the other hand, the occupational stress among electrical/electronic technologists and technical instructors in control group was not reduced. This means that job crafting intervention programme was effective in reducing occupational stress among electrical/electronic technologists and technical instructors in experimental group as evident in components of occupational stress and overall mean differences.

Research question 2

What is the effect of job crafting intervention programme on job performance of Electrical/Electronic Technologists and Technical Instructors?

Data for answering research question two are presented in Table 2

Table 2

Pretest and Posttest Mean Job Performance Scores of Electrical/Electronic Technologists and Technical Instructors Exposed to Job Crafting Intervention Programme and those not Exposed to the Intervention Programme

S/N	Variables	Test Classes	Groups	N	$\bar{X}$	SD	XD	XDD
1		Pretest	Experimental	26	29.30	3.72		
	Technical Competence		Control	25	28.61	3.21		
		Posttest	Experimental	26	39.99	3.71	10.69	0.01
			Control	25	32.34	2.53	3.73	0.68
2		Pretest	Experimental	26	30.10	5.23		
	Problem Solving		Control	25	29.93	3.67		
		Posttest	Experimental	26	39.01	3.61	8.91	1.62
			Control	25	31.90	3.56	1.97	0.11
3		Pretest	Experimental	26	32.81	3.11		
	Instructional Skills		Control	25	31.78	5.15		
		Posttest	Experimental	26	40.01	3.61	7.20	0.50
			Control	25	32.99	4.66	1.21	0.49
4		Pretest	Experimental	26	29.90	2.11		
	Communication Skills		Control	25	30.11	3.12		
		Posttest	Experimental	26	39.82	3.56	9.92	1.45
			Control	25	31.10	2.55	0.99	0.57
5	Adaptability	Pretest	Experimental	26	28.87	3.67		
			Control	25	28.99	2.63		
		Posttest	Experimental	26	38.99	1.75	10.12	1.92
			Control	25	29.98	3.27	0.99	0.64
6		Pretest	Experimental	26	31.33	2.90		
	Teamwork and Collaboration		Control	25	30.01	2.89		
		Posttest	Experimental	26	41.11	2.13	9.78	0.77
			Control	25	33.18	3.92	3.17	1.03
7		Pretest	Experimental	26	27.87	2.36		

	Time Management		Control	25	28.88	1.78		
		Posttest	Experimental	26	39.01	2.11	11.14	0.25
			Control	25	29.71	3.89	0.83	2.11
8		Pretest	Experimental	26	26.90	2.33		
	Professionalism		Control	25	27.44	3.89		
		Posttest	Experimental	26	37.98	3.52	11.08	1.19
			Control	25	29.01	4.23	1.57	0.34
9		Pretest	Experimental	26	28.01	3.78		
	Continuous		Control	25	27.91	3.63		
	Improvement	Posttest	Experimental	26	39.10	2.81	11.09	0.97
			Control	25	28.90	1.74	0.99	1.89
10		Pretest	Experimental	26	29.45	3.24		
			Control	25	29.29	3.33		
	Overall	Posttest	Experimental	26	39.44	2.97	9.99	0.27
			Control	25	31.01	3.37	1.72	0.04

Keys: *N = Number of Technologists and Instructors, SD = Standard Deviation, XD = Mean Difference, SDD = Standard Deviation Difference*

Data in Table 2 show the pre-test and posttest mean job performance scores of Electrical/Electronic Technologists and Technical Instructors exposed to job crafting intervention programme and those not exposed to the intervention programme. In table 2, after posttest, Electrical/Electronic Technologists and Technical Instructors in experimental group had an improvement in job performance as follows: technical competence (X ±SD = 10.69±0.01), problem solving (X ± SD = 8.91±1.62), instructional skills (X ± SD = 7.20± 0.50), communication skills (X ± SD = 9.92±1.45), adaptability(X ± SD = 10.12±1.92), teamwork and collaboration(X ±SD = 9.78±0.77), time management(X ±SD = 11.14±0.25), professionalism (X ± SD = 11.08± 1.19), continuous improvement(X ±SD = 11.09± 0.97) and (X ±SD = 9.99± 0.27) for overall mean response. For effectiveness of job crafting intervention programme, the job performance among Electrical/Electronic Technologists and Technical Instructors in control group was lower than those in experimental group. This means that job crafting intervention programme improved job performance among Electrical/Electronic Technologists and Technical Instructors in experimental group than those Electrical/Electronic Technologists and Technical instructors in control group and this is evident in the components of job performance and overall mean differences.

Discussion of findings

The findings of the study revealed that job crafting intervention programme was effective in reducing occupational stress of electrical/electronic technologists and technical instructors. The finding of this study agreed with the finding of Nathaniel and Dewi (2024) that job crafting intervention programme was effective to reduce job stress, improve job autonomy and innovative work behavior, and work engagement of workers. The study found that job crafting intervention programme improved job performance of electrical/electronic technologists and technical instructors. The finding of the study agreed with the finding of Heba et al., (2023) investigated the effect of job crafting intervention programme on harmonious work passion and career commitment among nurses, and indirectly discovered that job crafting intervention programme can improve job performance, and improve harmonious work passion and career commitment of nurses in their various places of work.

Conclusion

Electrical/electronic technology is a programme offered in Nigerian universities in order to equip students with knowledge and skills to plan, design, develop, implement, and maintenance related electrical/electronic gadget, apparatus and equipment for mankind. In order to meet these demands quality technologists and instructors must be on

ground to implement the practical components of the programme in order graduate competent graduates. In today's dynamic and competitive work environment, Nigerian Universities are constantly seeking for strategies to reduce occupational stress, enhance job performance, work quality and foster creativity among the technologists and technical instructors. Deplorably, the inception of TVET programmes in Nigeria till date has recorded a prevalent experience of high job stress and low satisfaction amongst Electrical/Electronic Technologists and Technical Instructors owing to militating factors like occupational stress, which consequently has induced low creativity and poor work quality. This menace for years has remained unabated, and as a result has produced students whose level of practical skills acquired in the course of their study does not meet the demands of the labour market and technological advancement upon graduation. In order to curb the problem and provide everlasting solution to the problem facing electrical/electronic technologists and technical instructors in discharging their duties effectively, the researchers set up this study to investigate the effect of job crafting intervention programme on occupational stress, performance of electrical/electronic technologists and technical instructors in universities in Southwest. The study therefore found out that job crafting intervention programme reduces occupational stress of technologists and instructors and improves performance of electrical/electronic technologists and technical instructors.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. Government agencies and Nigerian university administrators should organise seminar or workshops for electrical/electronic technologists and technical instructors using job crafting intervention programme
2. Government through relevant agencies should call for research projects to try the effectiveness of job crafting intervention programme on other constructs like task accuracy, job accomplishment among staff of tertiary institutions.
3. Higher institutions should encourage the use of job crafting intervention programme to organize seminars or workshops for technical staff regularly in their various institutions.

REFERENCES

Aduma, P. O., Owan, V. J., Akah, L. U., Alawa, D. A. Apie, M. A., Ogabor, J. O., ... Essien, C. K. (2022). Interactive analysis of demographic variables and occupational stress on university lecturers' job performance. *Humanities and Social Sciences Letters, 10*(2). 88-102. DOI: 10.18488/73v10i2.2952

Agu, P. U., Odo, J. U., Ede, M. O., Ezema, S., Omeke, F. C., Chukwuji, C. E., Diara, C., &Manafa, I. F. (2018). Financial incentive and communication style as panacea of job satisfaction among electrical/electronic teachers in technical colleges. Journal of Engineering and Applied Sciences, 13(20), 8377–8381.

Akah, L. U., Owan, V. J., Aduma, P. O., Onyenweaku, E. O., Olofu, M. A., Alawa, D. A., ... &Usoro, A. A. (2022). Occupational stress and academic staff job performance in two Nigerian universities.

Amoo, A. (2018). *Criteria for establishing tertiary institutions in Nigeria.*https://educeleb.com/establishing-tertiary-institutions-in-nigeria/

Bakare, J., Omeje, H. M., Ariyo, S. O., Nwaodo, S. I., Ijeoma, O. P., Ogunmilade, O. J., &Olaoye, O. A. (2020). Innovations into industrial-technology programmes of Nigerian universities for quality assurance.

Indonesian Journal of Electrical Engineering and Computer Science, 20(3), 1315-1324.

Bester, S. (2023). Exploring inclusive leadership and strategic visioning as pathways to well-being in TVET colleges. *Journal of Vocational, Adult and Continuing Education and Training*, *6*(1), 108-126.

Demerouti, E., Bakker, A. B., &Gevers, J. M. P. (2015). Job crafting and extra-role Behaviour: The role of work engagement and flourishing. *Journal of Vocational Behaviour, 91*. 87-96. https://doi.org/10.1016/jjvb.2015.09.001

Dikgare, S. S. (2020). Health-related factors affecting lecturers' job-performance at Vhembe Technical Vocational Education and Training College, Limpopo Province (Doctoral dissertation).

Döbler, A. S., Emmermacher, A., Richter-Killenberg, S., Nowak, J., &Wegge, J. (2022). New insights into self-initiated work design: The role of job crafting, self-undermining and five types of job satisfaction for employee's health and work ability. German Journal of Human Resource Management, 36(2), 113-147.

Dorenkamp, I., &Weiß, E. E. (2018). What makes them leave? A path model of postdocs' intentions to leave academia. Higher Education, 75, 747-767.

Geldenhuys, M., Bakker, A. B., &Demerouti, E. (2021). How task, relational and cognitive crafting relate to job performance: A weekly diary study on the role of meaningfulness. European Journal of Work and Organizational Psychology, 30(1), 83-94.

Gonzaga, J. S. (2019). Stress management practices of the faculty and staff of hightereducaton institutions (HEI) in three school in region 2: An assessment. *International Journal of Advanced Research in Management and Social Sciences*, *8*(6), 254-261.

Guo, Y., &Hou, X. (2022). The effects of job crafting on tour leaders' work engagement: the mediating role of person-job fit and meaningfulness of work. *International Journal of Contemporary Hospitality Management*, *34*(5), 1649-1667.

Hendy, H. M., Can, S. H., & Black, P. (2019). Workplace deviance as a possible "maladaptive coping" behavior displayed in association with workplace stressors. Deviant Behavior, 40(7), 791-798.

Hommelhoff, S., Weseler, D., &Niessen, C. (2021). The role of cognitive job crafting in the relationship between turnover intentions, negative affect, and task mastery. *Anxiety, Stress, & Coping*, *34*(6), 704-718.

Hu, Q., Taris, T. W., Dollard, M. F., &Schaufeli, W. B. (2020). An exploration of the component of job crafting. *European Journal of Work and Organizational Psychology, 29*(5), 776-793. https://doi.org/10.1080/1359432X.2020.1756262

Jacobs, C. (2023). Occupational stress and burnout. In R. W. Motta. (2023), *Burnout Syndrome - Characteristics and Interventions*. DOI: 10.5772/intechopen.1003104

Jacob, O. N., Jegede, D., & Musa, A. (2021). Problems facing academic staff of Nigerian universities and the way forward. *International Journal on Integrated Education*, *4*(1), 230-241.

Jakada, M. B., Aliyu, M. S., &Abubakar, A. A. (2023). Job crafting and intention to stay among university academics: the mediating role of job satisfaction. *Nigerian Journal of Management Sciences, 24*(2). 308-318. chrome-extension://efaidnbmnnnibpcajpcglclef

indmkaj/https://nigerianjournalofmanagementsciences.com/wp-content/uploads/2023/08/34.-job-crafting-and-intention-to-stay-among-university-academics-the-mediating-role-of-job-sat.pdf

Knight, C., Tims, M., Gawke, J., & Parker, S. K. (2021). When do job crafting interventions work? The moderating roles of workload, intervention intensity, and participation. *Journal of Vocational Behaviour, 124*. 103522. https://doi.org/10.1016/j.jvb.2020.103522

Lazazzara, A., Tims, M., & De Gennaro, D. (2020). The process of reinventing a job: A meta–synthesis of qualitative job crafting research. *Journal of Vocational Behavior*, *116*, 103267.

Lichtenthaler, P. W., &Fischbach, A. (2018). Leadership, job crafting, and employee health and performance. *Leadership & Organization Development Journal*, *39*(5), 620-632.

Maashin, A., Ogbuanya, T. C., &Bakare, J. (2022). Correlation Analysis of Demographic Variables, Job Stress and Productivity of Workers in Electrical Occupations. International Journal of Research and Innovation in Social Science, 6(6), 159-164.

Manzanares, S., I., Martínez-Corts, I., & Hernández, A. (2021). Crafting behaviours and employees' and their partners' well-being: a weekly study. *European Journal of Work and Organizational Psychology, 33*(3). 340-355. https://doi.org/10.1080/1359432X.2024.2314927

Melki, H., Bouzid, M. S., &Mrayeh, M. (2020). University supervisors' expectations for cooperating teachers during a TVET practical traineeship in the field of physical education. Journal of Technical Education and Training, 12(2), 77-86.

Mesuwini, J., &Mokoena, S. P. (2023). TVET lecturer work-integrated learning: opportunities and challenges. *International Journal of Learning, Teaching and Educational Research, 22*(8). 415-440.

Ogbuanya, T. C., Eseadi, C., Orji, C. T., Ohanu, I. B., Bakare, J., & Ede, M. O. (2017). Effects of rational emotive Behaviour coaching on occupational stress and work ability among electronics workshop instructors in Nigeria. *Medicine, 96*(19). e6891. doi:10.1097/md.0000000000006891

Ogbuanya, T. C. & Salawu, I. A. (2024). Analysis of influence of personality traits on career satisfaction and job performance of electrical/electronic technology education lecturers in Nigeria. *International Journal of Lifelong Education, 43*(2-3). 224-245. DOI: 10.1080/02601370.2024.2341760

Ogbuanya, T. C., & Yekinni, S. A. (2020). Analytical investigation of career variables as correlate work stress of electrical/electronic trade teachers in technical colleges. *International Journal of Electrical Engineering & Education,* 1–35. DOI: 10.1177/0020720920907880

Okeke, C. I. O. & Akobi, T. O. (2022). Work stress and gender as determinants of job satisfaction among early childhood educators in Cross River State, Nigeria. International Journal of *Research in Business and Social Science 11*(7). 92-99. https://www.ssbfnet.com/ojs/index.php/ijrbs

Okiridu, O. S. F., & Godspower, Y. J. (2021). Teachers' workload and effective instructional delivery of business education courses in Rivers State

Universities. International Journal of Innovative Social and Science Education Research, 9(1), 60-66.

Okoi, I. I., & Odigwe, F. N. (2018). Lecturers' financial well-being & job performance in universities in Cross River State, Nigeria. *Education for Today Journal*, *14*(2), 50-54.

Omeje, H. O., Ede, M. O., Okereke, G. K. O., Ede, A. O., Amaeze, F. E., Ike, J. O., ... & Igbokwe, I. C. (2023). Efficacy of rational emotive career counselling programme on occupational stress management in industrial hazard victims: safety practice implications. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 41(3), 644-662.

Owan, V. J., Odigwe, F. N., Okon, A. E., Duruamaku-Dim, J. U., Ubi, I. O., Emanghe, E. E., ... &Bassey, B. A. (2022). Contributions of placement, retraining and motivation to teachers' job commitment: structural equation modelling of the linkages. *Heliyon, 8*(4). https://doi.org/10.1016/j.heliyon.2022.e09334

Prasad, K. D. V., Rajesh, W., Vaidya, R., &Mruthyanjaya, R. (2020). Effect of occupational stress and remote working on psychological well-being of employees: An empirical analysis during COVID-19 pandemic concerning information technology industry in Hyderabad. *Indian Journal of Commerce and Management Studies*, *11*(2). 1-13.

Samuels, T. (2022). Systematic review: Burnout and occupational stress in higher education employees.

Shen, P., & Slater, P. (2021). The effect of occupational stress and coping strategies on mental health and emotional well-being among university academic staff during the COVID-19 outbreak. *International Education Studies, 14*(3), 82–95.

Sintayehu, B., &Hussien, A. A. (2021). Living standard of academic staff at Haramaya University. *Education Research International*. 2021. 1-11.

Thomas, E. C., Thomas, K. G., & Du Plessis, M. (2020). An evaluation of job crafting as an intervention aimed at improving work engagement. *SA Journal of Industrial Psychology, 46*(1), 1-12. https://hdl.handle.net/10520EJC-1f3dea7ef3

Tims, M., & Parker, S. K. (2020). How coworkers attribute, react to, and shape job crafting. *Organizational Psychology Review*, *10*(1), 29-54.

Wallin, A., Nokelainen, P., & Kira, M. (2022). From thriving developers to stagnant self-doubters: An identity-centered approach to exploring the relationship between digitalization and professional development. *Vocations and Learning*, *15*(2), 285-316.

Yekini, S. A. (2016) Methodological Need of Electrical/Electronic Workshop Accident Prevention in Technical Colleges in South-South Western Part of Nigeria. Journal of Information Engineering and Application, 6(9), 1-10.

Zhang, C., & Liu, L. (2021). The effect of job crafting to job performance. *Knowledge Management Research & Practice*, *19*(2), 253-262.

Zhang, F., & Parker, S. K. (2019). Reorienting job crafting research: A hierarchical structure of job crafting concepts and integrative review. *Journal of organizational behavior*, *40*(2), 126-146.