THE EFFECT OF ORGANISATIONAL ERGONOMICS ON THE QUALITY OF WORK DELIVERY OF ACADEMIC STAFF IN SELECTED TERTIARY INSTITUTIONS IN LAGOS STATE

BY

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Abstract

This study examines the effect of organisational ergonomics on the quality of work delivery of academic staff in selected tertiary institutions in Lagos State. A descriptive survey research design was adopted. The study population is four thousand two hundred and sixty- nine (4,269) academic staff in selected tertiary institutions in Lagos State. A sample size of three hundred and sixty- seven (367) was drawn from the population. The study adopted a stratified and purposive sampling technique in selecting the sample from the population. The study found that there is a moderate positive relationship (R = 0.461) between organisational ergonomics and the quality of work delivery of academic staff in selected tertiary institutions in Lagos State and an evaluation of the standardized coefficients of organisational ergonomics indicators and their associated p-values for the indicator Work schedule design (β WSD = .595, $p < 0.000$); for Teamwork (β T = -.160, $p < 0.016$) and Participatory design (β PD = -091, $p > 0.120$). The results of OE indicators β WSD and β T are statistically significant and can be used in predicting the performance of academic staff in the selected tertiary institutions in Lagos state. The study concluded that not all indicators in policy formation are significant, some indicators are expected to cause a drastic improvement which has an unexpected outcome. Therefore, recommended that developing a policy process that will examine characteristics of domains of ergonomics-workplace design, cognitive and organisational without limiting their policy to just one domain.

Keywords: Organisational Ergonomics, Quality of Work Delivery, Performance

Introduction

Organisational Ergonomics (OE) is the socio-technical system, including the organisational structure, processes, and policies (International Ergonomics Association, 2017). Which draws components from physical and cognitive ergonomics and is seen as the most recent of the three domains of ergonomics (Kramer, 2009). Gomathi and Rajini (2019) believe that OE aims to improve the working system completely, from quality management techniques to cooperation. It integrates and examines everything within the system to enhance the workplace and flow of work within an organisation. This is similar to the concept of system dynamics as observed by Oyebisi, Momodu, and Olabode (2013). The main focus is on the organisation as an entity rather than individual workstations as observed in physical and cognitive ergonomics. Thus, researchers like Kramer (2009), and Sharad and Irfan (2020) referred to the concept of organisational ergonomics as macro-ergonomics. Therefore, physical and cognitive ergonomics examine how to improve the well-being of employees and invariably performance in work-related musculoskeletal disorders (WMSDs) and mental stress/strain is about 33% of workplace injuries and illnesses in 2011 as observed by WellRight's (2018) report. But it is also important to examine the effect of work-related in an organisational decision element that impedes employees' health and performance within the socio-technical work system. This is to determine the chances of these issues becoming medical problems or possibly decreasing performance while increasing costs. Hence, this study will examine how organisational ergonomics affects the performance of academic staff in selected tertiary institutions in Nigeria. Others issue and challenges that are peculiar to the performance of academic staff in tertiary institution in Nigeria.

According to Ogunode and Adah (2022) examine the various challenges that affect the academic programmes during the accreditation exercises in the public universities in Nigeria. Some of the challenges are inadequate funding, poor preparation, inadequate academic staff, shortage of infrastructure facilities, insecurity problems, strike actions and corruption in Nigerian public universities. Ogunode and Adah (2022) opined that these challenges can be solved by the government by provide sufficient funded to the public universities, prepare for academic programmes accreditation exercise, employment of adequate academic staff, provision more infrastructure facilities, adequate security in the universities government should implement the agreement signed with various union groups in the universities and corruption within the universities should be addressed through the use of anti-corruption agencies. Ogunode and Abubakar (2020) identified that there are many problems facing universities administration work in Nigeria. Some of these problems are inadequate funding, inadequate lecturers, inadequate infrastructural facilities, brain-drain, incessant strike actions by the universities unions, institutional corruption, insecurity problems, weak administrators and poor capacity development lecturer, political interference in the universities administration, indiscriminate issuance of licenses for establishing new universities, universities autonomy dilemma, poor internally generated revenue among others. Ogunode and Abubakar (2020) opined that these challenges can be solved by the government in order to increase the funds of the universities, employed more academic staff, provide adequate infrastructural facilities, implement all agreement with unions, ensure effective staff development programme and effective motivation policy in all public institutions of learning in Nigeria.

Therefore, the rules and regulations that guide the academic system and administrative activities of the university is based on the NUC guidelines with the domicile and operating within the university. Despite the arrangement for effective administration work in Nigerian universities by the government and management and public universities institutions remain pose an enormous challenge to the government. This situation concerns both the policymakers and academicians in any institution. This study examined the challenges that frustrate the smooth management of public universities in Nigeria and made a new suggestion and the ways forward. This consideration of Organisational Ergonomics (OE) is a domain of ergonomics that addresses more subjective aspects of the workplace. Kramer (2009) further identified some elements of the Organisational Ergonomics domain such as Communication, Crew resources and management, Work schedule design, Teamwork, Participatory design, Cooperative work, new work paradigms, Quality management, Virtual organisations, and Community ergonomics. But most past literature on Organisational Ergonomics had failed to examine the elements of this domain as indicators to measure the level of Organisational Ergonomics in their studies. Thus, Sharad and Irfan (2020) concluded that most of the literature on Organisational Ergonomics failed to respect the critical ergonomics domains in their studies. This is a gap that this study tends to fill by examining how three of these elements of Organisational Ergonomics - Work schedule design, Teamwork, and Participatory design affect the quality of work delivery of academic staff in selected tertiary institutions in Lagos State. Hence, this study aims to examine how organisational ergonomics affects the quality of work delivery of academic staff in selected tertiary institutions in Lagos State.

Research Questions

1. What is the effect of organisational ergonomics on the quality of work delivery of academic staff in selected tertiary institutions in Lagos State?
2. What is the effect Organisational ergonomics on the performance of academic staff in selected tertiary institutions in Lagos State?

Research Hypotheses

1. H_1: Organisational ergonomics does not significantly affect the quality of work delivery of academic staff in selected tertiary institutions in Lagos State.

2. H_2: Organisational ergonomics does not have a significant effect on the performance of academic staff in selected tertiary institutions in Lagos State.

Literature Review

This study reviews the conceptual framework and theoretical framework. The study variables Organisational Ergonomics - Work schedule Design, Teamwork, Participatory Design, Quality of Work Delivery, and Performance are critically examined in this section;

Organisational Ergonomics

Glander-Dolo (2017) opined that none of the domains of Ergonomics - organisational, physical, and cognitive functions is in isolation. But like others, Glander-Dolo (2017) noted that Organisational Ergonomics (OE) is the most recent of the three domains with an all-embracing system ergonomics focusing on the theoretical background. Thus, Glander-Dolo (2017) aligned with the International Ergonomics Association (IEA, 2017). IEA defines OE as the scientific discipline concerned with the understanding of the interactions among humans and other elements of a system, and the profession that applies theoretical principles, data, and methods to design to optimize human well-being and overall system performance. A scientific discipline concerned with the optimization of sociotechnical systems, including their organisational structures, policies, and processes. To IEA (2017), the concept of a sociotechnical system does include several abstract components that need to be considered for optimization including culture, habits, human capability, human-machine interfaces, production streamlining, and reliability. Organisational Ergonomics comprises the components that make up a sociotechnical system as well as the organisational structure and all policies and processes that govern the system. It also focuses on the better Communication systems, crew resource management, work design, design of working times, teamwork, participatory design, community ergonomics, cooperative work, new work paradigms, virtual organisations, telework, and quality management (Glander-Dolo, 2017). According to Gomathi and Rajini. (2019) Organisational Ergonomics deals with the complete improvement of the work environment directly from quality administration to cooperation. It incorporates overseeing every process in the system for improvement. Glander (2017) is concerned with the socio-technical system optimisation, including organisational structure, policies, processes, risk management, work system design, resource management, working times, teamwork, participatory design, community ergonomics, cooperative work, virtual organisations, telework, communication, and quality management.

Work Schedule Design

Neil (2018) defined work schedule design as a model that shows the days within the week and times of the day to perform a job. But to stakeholders like Resume.com (2020), it is a model that often dictates peoples' daily or weekly time utilisation or reflects the specific days and hours assigned to an employee(s) to do a paid job/task. Also, to some engineers especially within the construction and production system, it is seen as an instructional list often designed for minor projects or alteration tasks. It is seen as an alternative to bills of quantities, permitting the pricing of articles, such as builders' work, etc. (Institution of Civil Engineers, 2020). Relating the above to an ergonomics system, this study defines Work Schedule Design as a model that shows a planned unit of time/period assigned within a planning horizon to perform a given task(s)/job(s) to achieve a harmonious work-life balance for employee in physical and cognitive ergonomics-and/or optimal utilisation of time and other resources indirectly-OE. Totterdell (2005) thought that the mental and physical health of employees depends on three scheduling dimensions of work such as what work is done, when the work is done, and how long it is done. Totterdell (2005) further noted that these scheduling dimensions are dependent on organisational management decision(s). However, Totterdell (2005) cited from the findings of the ILO (1995) that these basic dimensions of work schedule design decisions could cause fatigue-related problems as observed in many organisations where, for example, working at night or for

extended hours are common. Thus, the work schedule design may be a stress or according to the ILO (1995), which does not fit the need of the staff(s) and invariably impede the optimal utilisation of human resources.

The words stress and strain are so inexorably linked that the two constructs are researched and discussed across a diverse range of fields including economics, social psychology, sociology, management, health and medicine. Irrespective of the diverse meaning of these constructs to researchers from diverse backgrounds, this study adapted the concept of Scott (2020). Scott (2020) believed stress is a set of physical and psychological reactions to events that challenge or threaten the human while strain is the emotional, psychological, and physical changes that are observed as a result of the stress. The events can be things people do, hear, and feel. The specific reactions vary amongst individuals but the strain is mostly seen in terms of the deformation of the system under stress (Carol & Baer, n.d.). Scott (2020) believed that strain is a long-term effect of stress on the body, mind, and spirit, sometimes called toxic stress. most of the activities in academics guided by the institutional policy of timetable or work schedule, then this study will examine the relationship between past work schedule design and its possible stress level on academic staff.

Teamwork

Kroupa (2007) like some other researchers, believes that the system under observation influences researchers and stakeholders' different views of the concept of teamwork hence the inability to have a common definition for teamwork. Kroupa (2007) further opined that the conceptualisation of the word by any researcher is more dependent on the specific area of study. Kroupa (2007) then adopted two definitions from Delarue (2003) and Hacker (1998) in their work based on this area of study as followed. Groups of employees who have at least some collective tasks and where the team members are authorised to regulate mutually the execution of these collective tasks (Delarue, 2003). A Group work is defined by a common task requiring interdependent work and successive or integrative action (Hacker, 1998). Andreas and Emma (2007) examine the concept as a dynamic process involving two or more healthcare professionals with complementary backgrounds and skills, sharing common health goals and exercising concerted physical and mental effort in assessing, planning, or evaluating patient care.

While Eclipse Research Consultants (2003) in conjunction with the Department of Architecture at the University of Cambridge whose focus is on engineering construction projects sees the concept as: groups of people with complementary skills who are committed to a common purpose and hold themselves mutually accountable for its achievement, Ideally, they develop a distinct identity and work together in a coordinated and mutually supportive way to fulfil their goal or purpose. Because this study is based on the academic environment, the definition of the concept by Andreas and Emma (2007) was modified and adapted. This was because the original definition focused on health. Thus, the adapted concept defines teamwork as a process that required the interdependent collaboration of more than one professional with complementary backgrounds and skills to achieve common goals and generate value-added outcomes through open communication and shared decision-making.

According to Nasierowski and Arcelus (2012), the level of innovativeness is considered to be a complex issue; it shows the intensity of a system's involvement in new activities or implementation of new solutions in achieving the goal(s), for which these have not been used earlier. Though some researchers like Fay, Shipton, West, and Patterson (2015) and Pérez and Molina (2017) in their work had shown that teamwork has a good impact on the level of innovation but few other researchers like Kroupa (2007) also acknowledged its possible negative impacts such as higher work intensity and work overload. This indirectly also affects negatively the level of innovativeness of the team and invariably the organisation.

Participatory Design

Participatory Design (PD) was traditionally called co-operative design but in modern times known as co-design. PD is a decision-making design method that aims to solicit input from all stakeholders such as employees, vendors etc.

and most especially end users in the design process to ensure the outcome/output meet the necessary expectation (Nichols, 2009). Nichols (2009) further stressed that PD as a method focused not a design style but the processes and procedures of design. The observation of the concept of PD as *a new way to organise a work practice or to design a space* shows its importance to Organisational Ergonomics (OE). But its possibility effect on the flow of work as a domain of OE within academic system/organisation has rarely been examined.

To Joshbersin (2018) believes Flow of work is the sequence of connected steps that make up a work process or is concerned with the way work moves along with one operation to another. The flow of work aims at greater efficiency in every office activity, so that costs-mostly in term of time, finances and human effort are cut down to eliminate delays. Though, most researchers focused on a computer or construction base organisation, in this area of study like Merritt and Stolterman, (2012 as cited by Mihyun, Phil, and Craig, 2015),.and have shown PD has a positive relationship with the technological development but Halskov and Leong (2012 as also cited by Mihyun, Phil, and Craig, 2015) show that PD does have no relationship if used without acknowledging values in design. Unlike the above focus area, this study will change the focus to an academic system as identified in the statement of the problem and examine how PD affects a domain of OE in terms of the flow of work.

Employee Quality of Work Delivery

Quality of work has emerged as one of the most important aspects of job that makes certain long-term association of the employees with the organisation. QW always leads to positive atmosphere and attempts to satisfy the higher order need of employees. Quality of work leads to an atmosphere that encourages and improves their skill and good interpersonal relations. According to Fapohunda (2013), quality of work has significance for workers' morale and it affects absenteeism, turnover, and, consequently productivity. Employers aiming to attract and retain scarce qualified human resources need to understand the specific job characteristics and values that are important to workers so that they can design their workplaces to be sensitive to the different needs, values and how employees experience quality of work. Creating a favourable job environment and ensuring employee job satisfaction is given impetus by an understanding of workers' perception of quality of work experiences of employees and work-related behaviors. Dada (2006 as cited by Fapohunda, 2013) asserts that quality of work affects employees' works. Fajemisin (2002 as cited by Fapohunda, 2013) observed that quality of work is important for organisation success and competitive advantage because there is evidence indicating that the nature of the work environment is related to satisfaction responses in terms of organisational identification, job satisfaction, job involvement, job effort, job performance, intention to quit, organisational turnover and personal alienation.

The terms *'quality of work'* also refers to the favourable or unfavourables aspect of the job environment for people working in the organisation. According to Srivastava and Kanpur (2014) quality of work is the existence of a certain set of organisational conditions or practices. It is a degree to which members of a work organisation are able to satisfy personnel needs through their experience in the organisation. Employee quality of work delivery is a performance measure that is not just a period evaluation within a system. It is a continuous, positive activity that requires adjustments to work performance as needed, and can be assessed and supported to meet the system goals. To stakeholders like (Glass, 2019), explaining the concept of *''Employee quality of work delivery''* as a performance measure can be difficult, but a critical examination of views from different perception can give a better understanding. To Thompson (2019), employee quality of work delivery helps to observe how any given employee is performing. It also gives insights into overall problems or gaps with identified project team. if every employee is doing the same thing poorly, then the root of the problem could be a training issue. John (2017) believed that employee quality of work delivery is the value of work delivered by an individual. This can include the quality of task completion, interactions and deliverables. It is also a common consideration in managing the performance of programs, projects, vendors and individuals.

Chartered Institute of Personnel and Development-CIPD (2017) noted that a clear definition of employee quality of work, is not yet forthcoming. Agreeing on what comprises *'good'* or *'decent quality'* work delivery is part of the

challenge. To this study, this is because most literatures such as Svenn-Åge, Torstein, and Karen (2009) focused on *'job quality'* as if it has the same concept as 'quality of work' with similar challenges in concept generation. As identified by CIPD, *'quality of work' just like 'job quality'* has dimensions that are largely reflected by the disciplinary traditions of the researchers. Thus, this study examines the concept of employee quality of work delivery' in terms of quality of work output of individual employee of the selected institutions. Hence, this study adapted John's (2017) conceptualisation of employee quality of work delivery as the value of work delivered by an individual within, a given operating system.

Performance

Thao and Hwang (2011) stressed that perceived employee performance represents the general belief of the employee about his behaviour and contributions to the success of organisation. Employee performance may be taken in the perspective of three factors which make it possible for one worker or team to perform better than others such as declarative knowledge, procedural knowledge and motivation (Thao & Hwang, 2011). Although, other organisational elements such as praise and recognition, compensation and financial reward are impact on employee performance, studies have also shown that, the design of employee's workplace system is a key determinant of their level of performance (Asante, 2012).

Conceptual Framework

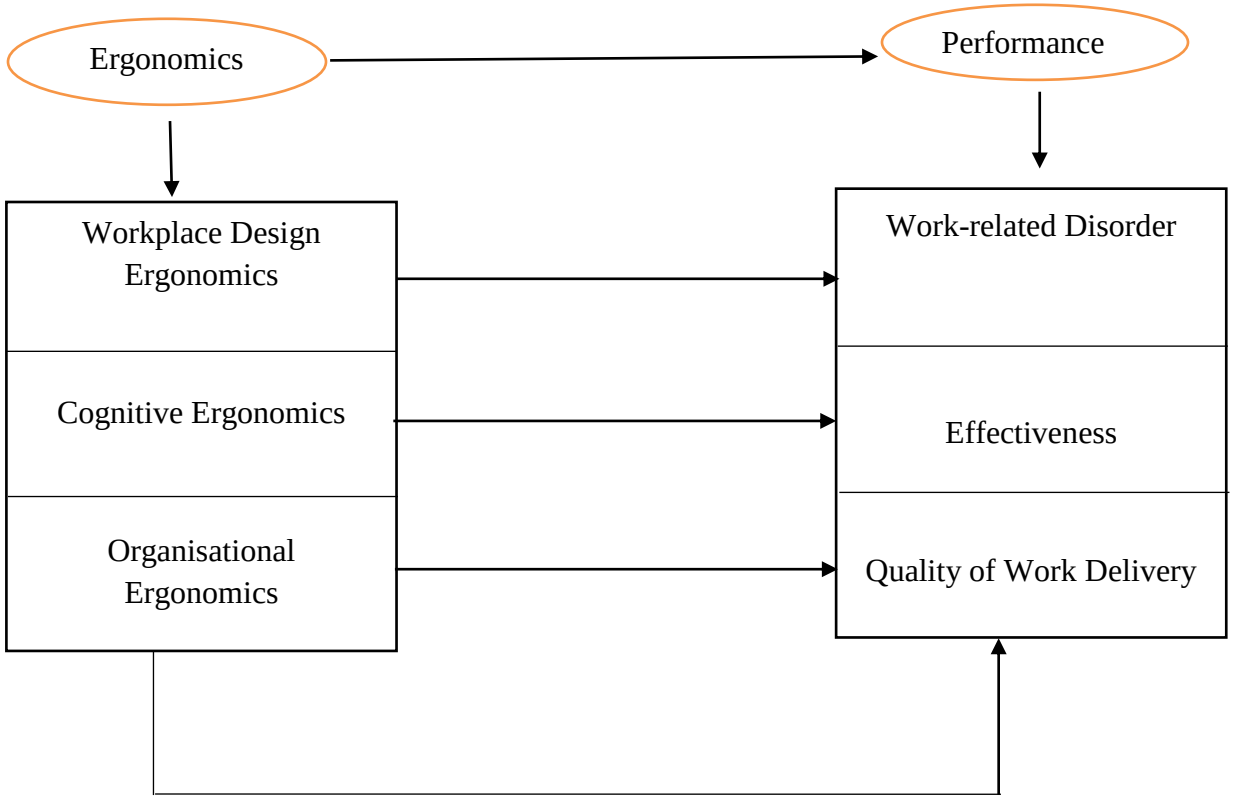

Figure 2.1: Conceptual Interaction of study variables

Figure 2.1 is a simple model to reflect an initial conceptual interaction of variables and the identified performance indicators.

Theoretical Framework

The hypotheses based on the Job Demand-Resource (JD-R) Theory involved in the job resources which help employees to meet demands at workplace and the surplus resources helps them in extra-role behaviours (Bakker & Demerouti, 2014). A fundamental proposition of JD-R theory is that job demands and personal resources activate different process (Demerouti *et al.* 2001). Job demands can lead to a health-impairment process: having high job demands such as an extreme workload, leads to constant overtaxing and in the end to burnout. Demerouti *et al.* (2001) developed the Job Demands-Resources (JD-R) Model in 2006. The model states that when job demands are high and job resources/positives are low, stress and burnout increase. Conversely, a high number of job positives can offset the effects of high job demands. Examples are work pressure and emotional demands. Job resources include: physical, psychological, social, or organisational aspects of the job that are either functional in achieving work goals; reduce job demands and the associated physiological and psychological cost; stimulate personal growth, learning, and development. Job demands include, for example, workload, problems with equipment, long working hours, time pressure and emotional strain (Bakker *et al*., 2003). The Job Demands-Resources Model (JD-R Model) is a model that shows the functioning of employees' well-being. The model consists of two main elements: job requirements and job resources. Job requirements concern the physical, social or emotional characteristics of the job and the work environment while Job resource concerns the physical, psychological, social, or organisational aspects of the job that are either functional in achieving work goals, reduce job demands, associated physiological and psychological cost, stimulate personal growth, learning and development.

Methodology

This study adopted descriptive research designs. The study population is four thousand two hundred and sixty- nine (4,269) academic staff in selected tertiary institutions in Lagos State. While using Yamane (1969 as cited by Anokye, 2020), a sample size of three hundred and sixty- seven (367) was drawn. The sample was stratified as shown in Table 3.1 such selected institution was represented. As identified earlier in the study, scope, and limitation, the convenience sampling technique was used to choose Lagos State because of accessibility and proximity, cost, and time constraints. While purposive sampling techniques were used in each stratum to elicit information from those willing, relevant to the objectives of the study, and will return the questionnaire within an acceptable time. A five-point Likert-scaled questionnaire was designed for data collection to establish how employees' performance and health are affected by ergonomics in the academic environment. Copies of the questionnaire were taken to the office and distributed to the staff with minimal persuasion or posted online through emails and other relevant social media within four weeks. Descriptive statistics and inferential statistics with the aid of a statistical software called IBM SPSS (Statistical Product and Service Solution) were used to analyse the data collected.
Yamane Formula.

$$n = \frac{N}{1 + N(e)^2}$$

Where

n is the sample size,

N is the population size which is 4,269 and e is the level of precision.

Taken e to be 5% in this study Applying this formula, we get

$$n = \frac{4269}{(1 + 4269(.05)^2)}$$

$$= 4269/\ (1 + 4269(.0025)$$

$$n = 365.73 = 366$$

The result is approximated to the nearest whole number. For example, for Lagos State University, the sample was (712/4269) *366=61.04 this is approximate to 61. The final summation of the sample size column resulted in 367. Since this figure is higher than the 366 from the Yamane formula it can represent the system adequately.

Table 3.1:

Distribution of Samples in Strata

S/N	Institution	Number Of Academic Staff		Sample
		N	Source	N
1	Lagos State University	712	Registry office	61
2	Lagos State University of Science and Technology	738	Ministry of Education	63
3	Lagos State University of Education	358	Registry office	31
4	Yaba College of Technology	713	Registry office	61
5	Caleb University	79	Ministry of Education	07
6	Anchor University	43	Ministry of Education	04
7	University of Lagos	1627	Ministry of Education	140
	TOTAL	4269		367

Data Analysis

Hypothesis One: There is no significant effect of organisational ergonomics on the quality of work delivery of academic staff in selected tertiary institutions in Lagos State.

Table 4.1:

Model Summary of Organisational Ergonomics and the Quality of Work Delivery of Academic Staff in Selected Tertiary Institutions in Lagos State.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.461[a]	.213	.206	.717889

a. Predictors: (Constant), PD, T, WSD
b. Dependent Variable: Quality of Work Delivery

The table presents the model summary results of the regression analysis on the test for the one hypothesis. The table shows a moderate positive relationship (R = 0.461) between organisational ergonomics and the quality of work delivery of the academic staff in selected tertiary institutions in Lagos State. The model further revealed the extent to which organisational ergonomics explains the changes in the quality of work delivery within the academic system in Lagos State. The results also show that the Adjusted R-squared is 0.206 which means that, 20.6% of the variability of the quality of work delivery of academic staff in selected tertiary institutions in Lagos State is accounted for by the model, considering the number of predictor variables of organisational ergonomics; Work schedule design-WSD, Teamwork-T, and Participatory design-PD within the environment -in the model. This result is statistically significant because the p-value of the result (0.000) is less than 0.05 level of significance used for this study as shown in Table. This implies there's a 0.000 probability of finding this sample regression, or a larger one if the

actual population regression is zero. This study therefore rejected the null hypothesis one and accepted the alternative hypothesis which states that there is significant relationship between organisational ergonomics and quality of work delivery of academic staff in selected tertiary institutions in Lagos State.

Table 4.2:

Analysis of Variance Result for Hypothesis One

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	48.282	3	16.094	31.229	.000[b]
	Residual	178.832	347	.515		
	Total	227.114	350			

c. Predictors: (Constant), PD, T, WSD

The ANOVA (Model) table presents the result from the null hypothesis test that Organisational ergonomics does not significantly affect the quality of work delivery of academic staff in selected tertiary institutions in Lagos State. The ANOVA table also shows that the computed F statistic is 31.229, with an observed statistical significance level of 0.000 which is less than 0.05. The research hypothesis was rejected. This implies that Organisational ergonomics had a significant relationship with the quality of work delivery of academic staff in the selected tertiary institutions in Lagos State.

Hypothesis Two:

Organisational ergonomics does not have a significant effect on the performance of academic staff in selected tertiary institutions in Lagos State

Table 4.3:

Coefficients Table between Organisational Ergonomics and Performance of Academic Staff in Selected Tertiary Institutions in Lagos State.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.919	.257		7.456	.000
	WSD	.721	.084	.595	8.602	.000
	T	-.179	.074	-.160	-2.425	.016
	PD	-.121	.077	-.091	-1.559	.120

a. Dependent Variable: Performance

Table 4.3 presents the **Coefficients** table between Organisational ergonomics and Performance of Academic Staff in Selected Tertiary Institutions in Lagos State. The table shows an evaluation of the standardized coefficients of organisational ergonomics indicators and their associated p-values for the indicator Work schedule design (β_{WSD} =

.595, $p < 0.000$); for Teamwork ($\beta_T = -.160$, $p < 0.016$) and Participatory design ($\beta_{PD} = -091$, $p > 0.120$). The results of the standardized coefficients of OE indicators β_{WSD} and β_T are statistically significant and can be used in predicting the performance of academic staff in the selected tertiary institutions in Lagos state. As their p-value is less than 0.05 level of significant, however β_{PD} is not statistically significant as its p-value of 0.12 is greater than 0.05 level of significant.

An examination of the above condition from table shows that, only work schedule design of the three study indicators of Organisational Ergonomics (OE) is individually statistically significant. This is because an examination of Table shows that, only work schedule design satisfied the condition. Based on this, though the null hypothesis two is rejected as the combine impact of the three indicators established that there is a moderate positive relationship between the indicators of OE and performance, the proposed model equation cannot be represented by two of the identified indicators: Teamwork and Participatory design in this study.

Discussions of Findings

The result of the first hypothesis above shows a positive relationship between organisational ergonomics on the quality of work delivery of academic staff in selected tertiary institutions in Lagos State. The outcome of the tested hypothesis as identified earlier in Table 4.1 where $R = 0.461$ shows a moderate relationship between organisational ergonomics and quality of work delivery of academic staff in selected tertiary institutions in Lagos State. This result agrees with the outcome study by (Gomathi & Rajini, 2019) which concluded that human assets and well-being are improved whenever the design of the Physical workplace is facilitated by organisational ergonomics. The second hypothesis focused on the significance of three indicators of Organisational Ergonomics namely: Work Schedule Design, Teamwork, and Participatory Design, and interface with the performance of academic staff. Hence, based on the Standardized Coefficients (βOrganisational) in Table 4.2 and the result of the work schedule design is statistically significant with values ($\beta_{WSD} = .595$, $p < 0.000$); it satisfies the study-identified conditions for an indicator to be statistically significant. This agrees with the Job Demands-Resources Theory by Bakker and Demerouti, (2014). That is stress and strain within academic organisations are significantly dependent on work schedule design as identified in this study's conceptualisation of work schedule design. This invariably affects performance as noted by Sunita & Kundu (2019).

The two other indicators of OE: Teamwork and Participatory Design exhibit the following values Teamwork ($\beta_T = -.160$, $p < 0.016$) and Participatory design ($\beta_{PD} = -.091$, $p > 0.120$). However, the p-value for teamwork shows that statistical significance. While Participatory design which has a p-value greater than 0.05 is not statistically significant. This agrees with policymakers and management of institutions should examine careful indicators that will positively impact the system as Veiko, *et al* (2014 as cited by Olabode 2018) noted that some indicators that are expected to cause a drastic improvement which sometimes has an unexpected outcome. This may be due to factors that lead to the level of awareness at the time of implementation, the culture of the system, or the environment. This observation was also noted by Cerna (2013 as cited by Olabode 2018) failed policies are sometimes due to the wrong choice of variables or indicators in the policy formation at points in time. These indicators show an inverse impact on a system at a point in time and may cause an improvement at another point due to policy change.

Conclusion

This study assessed organisational ergonomics and Quality of work delivery of the academic staff of selected tertiary institutions in Lagos State**.** The study concluded that not all variables/indicators in policy formation are significant, which means some indicators are expected to cause a drastic improvement, which sometimes has an unexpected outcome. It also means that failed policies are sometimes due to the wrong choice of variables or indicators in policy formation at points in time. Some indicator shows an inverse impact on a system at a point in time and may cause an improvement at another point due to policy change. Thus, to develop a policy process that will examine basic characteristics of three domains of ergonomics-workplace design, cognitive and organisational

without limiting their policy to just one domain. Though a degree of flexibility is required for the objectives of ergonomics policy to be respected, the Nigerian institutions should develop an implementation framework that is capable of enforcing the right sanctions on defaulters of well-defined and established ergonomics policy.

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