WORKING CONDITIONS AS CAUSATIVE FACTOR FOR HIGH TURNOVER AMONG ICT STAFF IN FEDERAL UNIVERSITIES IN SOUH-WEST, NIGERIA

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Abstract

This research examined the relationship between working conditions and high turnover among ICT professionals in federal universities in South-West Nigeria. Guided by two research questions and two hypotheses, the study employed a descriptive survey approach to explore the impact of various factors on turnover rates. The population comprised all Information and Communication Technology (ICT) personnel employed in South-West Federal universities. A multi-stage sampling procedure selected 48 participants. Data was collected using a self-developed, structured instrument named the Working Conditions and Manpower Turnover Questionnaire (WCMTQ), which includes 10 items rated on a 4-point modified Likert scale, and has received favorable evaluations. The instrument was validated by measurement and assessment experts, and a pilot test yielded a reliability coefficient of 0.78. Descriptive statistics, including frequency counts and percentages, were used for demographic analysis, while means were computed for research questions. Hypotheses were tested using Chi-square statistics, with analyses conducted using the Statistical Package for the Social Sciences (SPSS).

Keywords: Turnover, Working conditions, ICT (Information Communication Technology, IT (Information Technology) DOI: https://doie.org/10.0913/SER.2024583548

Introduction

Technology has revolutionized various aspects of human endeavor, providing ease and efficiency across multiple domains. The advent of new information and communication technologies (ICTs) has significantly transformed production processes, enabling modifications and enhancements in how work is organized and controlled. These advancements have reshaped employment structures, creating new job opportunities while rendering some professions obsolete or significantly altering their functions. As technology continues to evolve, it remains a dynamic and everexpanding field, rather than diminishing. Federal universities, striving to keep pace with technological advancements, face challenges related to manpower due to suboptimal working conditions. The push for academic institutions to integrate twenty-first-century technologies underscores the importance of improving working conditions to boost productivity. As emphasized by Eurofound & ILO (2019), the United Nations 2030 Agenda for Sustainable Development highlights the critical need to enhance working conditions, addressing job opportunities and advocating for decent work to eradicate poverty. A key factor in the productivity of ICT teams is the quality of human resources or manpower. ICT's role in universities has disrupted traditional teaching and learning methods by offering students greater flexibility in their study schedules. Unlike conventional approaches where students follow a set timetable, ICT tools allow learners to manage their study time according to their personal schedules. This flexibility enhances participation and provides access to educational programs for students previously constrained by other commitments. Online learning technologies have shifted education away from rigid schedules, enabling asynchronous learning that accommodates various needs (Vindhyavashini & Padma, 2020). ICT tools support diverse learning methods—visual, auditory, interactive—and promote engagement and motivation among students. Additionally, educators benefit from ICT by selecting appropriate tools for teaching and student interaction, aligning with the goals of access, equity, and quality in education (Vindhyavashini & Padma, 2020). In the Gen Z era, ICT is essential for universities, complementing traditional educational methods and supporting the evolving demands of modern education.

According to Igbinoba, Salau, Falola, Olokundun, and Ogueyungbo (2019), ICT staff in tertiary institutions often leave their positions due to inadequate reward systems and poor working conditions, including neglected infrastructure and unfavorable service conditions. This phenomenon leads to high employee turnover, which encompasses various forms of personnel movement such as voluntary resignation, involuntary redundancy, retirement, termination, or death. Voluntary turnover occurs when employees leave due to personal choices, while involuntary turnover is initiated by the organization, often involving dismissals beneficial to the organization (Armstrong, 2006). Employee turnover significantly impacts organizational operations and long-term viability, with high turnover potentially costing up to 40% of a company's annual profits, as noted by Hay Group (2004). The costs of turnover include both direct and indirect expenses, such as the loss of technical expertise, productivity, and innovative potential (Price, 2007).

Ibidunni, Osibanjo, Adeniji, Salau, and Falola (2016) highlight that internal governance issues, favoritism, and poor working conditions contribute to turnover. Globalization, technological advancements, and new work organization methods have made it increasingly important to address and improve working conditions. Moore (2000) identified work overload as a major factor contributing to job fatigue and turnover intentions among IT professionals. Workload, defined as the amount of work assigned to be completed within a specified timeframe, can lead to decreased performance and job dissatisfaction when excessive (ILO, 2019). Eurofound (2019) notes that while long working hours may temporarily boost productivity, they can ultimately reduce productivity and lead to significant human and economic losses. To retain skilled employees, creating a supportive and effective work environment is crucial, allowing workers to utilize their skills and resources effectively. Employee turnover entails various costs, including administrative expenses for recruitment, costs during vacancies, and training for new hires. This research aims to explore how working conditions impact ICT staff turnover in federal institutions in Nigeria.

Statement of the problem

The urgency to enhance and monitor working conditions has grown significantly due to the effects of globalization, technological advancements, and evolving work organization methods over recent decades. The shift in the economics of labor—from agriculture to manufacturing and now to services—has been driven by new information and communication technologies (ICT) (Eurofound & ILO, 2019). ICT has not only revolutionized the workplace but has also dramatically transformed learning and educational environments, becoming indispensable in nearly every facet of modern life.

One area where ICT has made a substantial impact is in the learning environment, particularly within universities. As the final stage of formal education, universities benefit greatly from the integration of ICT, which enhances the educational experience. However, this transformation relies on the retention of experienced ICT personnel who are crucial for maintaining effective and innovative technology use. Recently, a significant number of ICT professionals in Nigerian federal universities have been leaving their positions, a trend often referred to as the "japa syndrome." This high turnover rate poses a serious challenge, making it difficult to sustain a consistent and effective ICT operation within these institutions. Academic experts have linked turnover to job dissatisfaction and decreased organizational commitment, suggesting a direct correlation between high levels of discontent and the likelihood of seeking alternative employment. This perspective highlights how emotions and attitudes toward one's job can drive behavioral changes, with repercussions that extend beyond the organization to affect individuals and society at large.

Addressing this issue is crucial because ICT's role in universities has led to improved responsiveness and support, facilitating efficient administrative functions and seamless communication among staff through various services and applications. The rapid pace of technological change has made staff retention in ICT roles increasingly challenging. Literature on manpower turnover within ICT personnel underscores that working conditions are a critical determinant of staff retention. Enhancing these conditions could serve as a key variable in retaining skilled professionals and ensuring the continued success of ICT operations in universities.

Research Objectives

The purpose of the study is to:

- 1. examine the influence of work hours on increase in turnover of ICT workers in south-west federal universities
- 2. investigate the influence of workload on the high turnover of ICT workers in south-west Federal universities in Nigeria

Research Question

The following research questions were formulated:

- 1. How do work hours increase turnover of ICT workers in south-west federal universities?
- 2. To what extent does workload influence the high turnover of ICT workers in south-west Federal universities in Nigeria?

Research Hypothesis

The following hypotheses were postulated to be tested in the study:

- 1. Work hours do not significantly increase the turnover of ICT workers in southwest federal universities
- 2. There is no significant influence of workload on the high turnover of ICT workers in south-west Federal universities in Nigeria

Research Design

The study employed a descriptive survey research approach to investigate the working conditions and manpower turnover among ICT workers at federal universities in South-West Nigeria. This method is particularly effective for gathering detailed information and insights about a specific group, allowing researchers to make inferences about broader trends based on a representative sample. Osuala (2001) describes a descriptive survey design as a research approach that collects viewpoints from a representative sample within a particular group to draw conclusions about the overall perceptions or perspectives of the entire population.

The study's target population comprised all Information and Communication Technology (ICT) personnel employed at federal universities in South-West Nigeria. To select participants, a multi-stage sampling technique was utilized. Initially, three federal universities—Federal University of Agriculture, Abeokuta; University of Lagos, Akoka; and Obafemi Awolowo University, Ile-Ife—were randomly chosen from the pool of federal universities in the region. Subsequently, a sample of 48 ICT staff members was selected using convenience sampling. Creswell (2012) defines convenience sampling as a method where participants are chosen based on their willingness and availability to participate in the study. This approach facilitated the gathering of relevant data from those who were readily accessible and willing to contribute to the research.

Instrument for Data Collection

The researcher used a self-designed questionnaire called the Working Conditions and Manpower Turnover Questionnaire (WCMTQ) the questionnaire consists of two components, namely Section A (Biodata of respondents) and B (Questionnaire items). The questionnaire used a Likert scale consisting of four answer options, namely Strongly Disagreed (SD), Disagree (D), Agreed (A), and Strongly Agreed (SA).

Method of data collection

Data were collected through questionnaire. The researcher with the help of two research assistants took part in the distribution and retrieval of the filled questionnaire.

Data Analysis Techniques

The acquired data were summarised using descriptive statistics, including a basic frequency table/percentage and means suitable to answer the research question, the proper inferential statistics of Chi-square were used to test the two hypotheses.

Findings and Recommendations

This chapter deals with the presentation of the data as well as the interpretation and discussion of the findings.

Descriptive Analysis of the Demographic Background of Respondent

Cable 1:Demographic Variables of the Respondents							
Sex	Frequency	Percent					
Male	28	58.0					
Female	20	42.0					
Total	48	100.0					
Marital Status							
Single	07	15.0					
Married	31	65.0					
Divorced	2	4.0					
Single Parent	8	16.0					
Total	48	100.0					
Age							
21-30 years	11	23					
31-40 years	23	48					
41-50 years	12	25					
51 years and above	2	4					
Total	48	100.0					
Highest Educational Qualification							
NCE	6	13					
B.A/B.Sc./B.Ed.	22	45					
MA/M.Sc/M.Ed	12	25					
OTHERS	8	17					
Total	48	100.0					
Work Experience							
1-5years	26	54					
6-10years	11	23					
11-15years	6	13					
16-20years	5	10					
Total	48	100					

Table 1 summarizes the bio-data of respondents, revealing a diverse demographic profile. Gender distribution shows 28% male and 58% female participants, ensuring representation of both genders. Marital status includes 15% single, 65% married, 4% divorced, and 16% single parents. Age ranges from 23% in the 21-30 years group, 48% in the 31-40 years group, 25% in the 41-50 years group, to 4% above 51 years. Academic qualifications vary, with 13% holding NCE certificates, 45% having Bachelor's degrees, 25% with Master's degrees, and 17% with other qualifications. Work experience is spread across 54% with 1-5 years, 23% with 6-10 years, 13% with 11-15 years, and 10% with 16-20 years, reflecting a range of professional experience within the sample.

Research Question 1: How do work hours increase turnover of ICT workers in federal universities?

Table 2:Responses on work hours and st	aff turi	10ver N=	=48		
Work Hours and Staff Turnover	SD	D	А	SA	Х
In my unit working hours is not too much.	27	8	10	3	3.8
	56%	17%	21%	6%	
At work colleagues do not have problem with	30	6	7	5	3.6
the hours used in working daily.	62%	13%	15%	10%	
				9	
Work hours at my workplace causes exit of	6	5	28	19%	2.9
staff.	12%	10%	58%		
				10	
Exit of staff is too much because of the hours	5	7	26	21%	2.4
needed to work daily.	10%	15%	54%		
Old and new staff are not sustained due to rigor	9	3	20	16	3.5
of work hours.	(19%)	(6.0%)	(42%)	(33	
))		%)	
Overall mean =					3.2

Research Question 2: How do work hours increase turnover of ICT workers in federal universities?

Responses on Workload and Staff Turnove	er N=48				
Workload and Staff Turnover	SD	D	SA	А	Х
The burden of work is overstretched at	7	3	17	21	3.1
my workplace.	16%	6%	35%	44%	
My work is overwhelming and	4	9	15	21	3.2
whenever possible I will resign.	8%	19%	31%	42%	
I love my job although some whom	9	6	17	16	2.8
were employed together have left due to too much work.	19%	13%	35%	33%	
The load of work is not much although	8	10	18	17	3.1
many have resigned and new staff are employed.	17%	20%	38%	35%	
I think if workload is lesser staff can be	2	8	18	20	3.2
sustained.	4%	17%	37%	42%	
Overall Mean=					3.1

-Weyl-lood and Staff Trum over N=40 Working Conditions as Causative Factor for High Turnover Among ICT Staff in Federal Universities in South-West, Nigeria

Consequently, the findings of this research suggest that workload and the number of hours worked has a substantial impact on employee turnover.

Hypotheses Testing

Hypothesis One

Work hours do not significantly increase the turnover of ICT workers in federal universities

Table 2:	Influence of work hours on the turnover of ICT workers in federal
	universities in Nigeria

		ver ster								
Variables			Ν	Mean	S.D.	Df	L.S	x ² cal	x ² tab	Remarks
Work-hour										
			48	5.59	1.289	12	0.05	53.78	21.026	Reject
Turnover	of	ICT								H_{01}
workers										

Table 2 displays the Chi-square results examining the impact of work hours on ICT worker turnover in federal universities. The calculated Chi-square value is 53.78, which exceeds the tabulated value of 21.026. Because the calculated value is significantly higher than the tabulated value (χ^2 _cal = 53.78 > χ^2 _tab = 21.026), the null hypothesis is rejected. This indicates that work hours significantly influence the turnover rate of ICT workers in federal universities in Nigeria.

Hypothesis Two

There is no significant influence of workload on the high turnover of ICT workers in Federal universities in Nigeria.

Table 3:	Influence	of	workload	on	turnover	of	ICT	workers	in	Federal
universities i	n Nigeria									

Variables	Ν	Mean	S.D.	Df	L.S	x ² cal	x ² tab	Remarks
Workload								
	48	13.95	1.89	27	0.05	47.98	21.026	Reject H ₀₂
Turnover of ICT workers								

Table 3 shows the Chi-square results for the impact of workload on ICT worker turnover in federal universities in Nigeria. The calculated Chi-square value is 47.98, which is higher than the tabulated value of 21.026. Since the calculated value exceeds the tabulated value (χ^2 _cal = 47.98 > χ^2 _tab = 21.026), the null hypothesis is rejected. This conclusion indicates that workload significantly affects the high turnover rates of ICT workers in federal universities in Nigeria.

Discussion of Findings

The ICT workforce is crucial in retaining talent within federal institutions, as neglecting talent retention can lead to substantial unforeseen expenses for Nigerian federal universities. High employee attrition can have a profoundly negative impact on organizational stability and effectiveness, making it challenging to sustain a consistent and successful operation. It is essential for management to assess staff turnover rates and evaluate their impact on the organization's overall success. Data on turnover can aid in the strategic allocation of resources, forecasting, and management. This study supports the conclusions of Mitri and Gupta (2002) that employee turnover is a critical area of research in organizational studies due to its significant effects on both daily operations and long-term viability. Hay Group's 2004 study indicated that high turnover could result in costs up to 40% of a company's annual profits. Many organizations fail to fully recognize these costs, particularly the indirect ones. Employee departures can lead to substantial opportunity costs in terms of lost technical expertise, commitment, productivity, motivation, exceptional performance, innovative potential, experience, educational attainment, and industry position (Price, 2007).

Ongori (2007) defines employee turnover as the ratio of employees who leave an organization during a specific period to the average number of employees during that same period. Managers view turnover as the process of filling vacant positions, which occurs due to either voluntary or involuntary reasons. This continuous cycle of recruitment and training is known as turnover. Employee turnover can be either voluntary, where employees choose to leave, or involuntary, where the organization terminates their employment. This research further confirms that workload has a significant impact on the high turnover rate among ICT personnel. This finding aligns with Greenslade and Paddock (2007), who noted that various factors such as workload, schedule, professional identity, and work environment influence turnover rates. Excessive workload leads to a high rate of turnover. Mwami (2014) investigated how leadership style, technology, job responsibilities, workload, and employee turnover are interconnected. The study found that leadership styles and job responsibilities significantly affect employees' decisions to stay or leave, directly influencing turnover. The research also highlighted that while ICT integration is not a major concern for employers, work role ambiguity contributes significantly to turnover by creating accountability and reporting challenges. Excessive job demands and strict deadlines result in stress and burnout, adversely affecting organizational performance and leading to staff attrition due to increased pressure.

Zinkea, Vahle-Hinzb, and Hoppe (2021) examined the relationships between ICT workload, psychological detachment, and emotional exhaustion. Their study revealed a positive correlation between high ICT workload and increased emotional exhaustion over time. They also found evidence of a mediation process through psychological detachment, particularly under high workplace tele-pressure. Overall, the research demonstrated that significant ICT strain is associated with higher levels of emotional weariness and reduced ability to mentally detach from work, which is particularly pronounced under high levels of job telepressure.

Recommendations

This study highlights the critical role of the ICT workforce in nurturing student talent within universities, emphasizing that overloading them with excessive work could lead to hidden costs for federal universities in South-West Nigeria. The work environment, characterized by respect, responsibility, and positive interaction, plays a crucial role in motivating employees to perform optimally. Low employee turnover is often indicative of well-defined roles, effective job design, and ongoing personnel development (Appelbaum and Kamal, 2000). To mitigate staff attrition caused by prolonged work hours, employers should offer reasonable working hours to attract and retain staff effectively.

Murti and Martdianty (2022) explored how workload, work-life balance, flexible working arrangements, and job satisfaction influence turnover intentions among IT professionals. Their findings suggest that achieving a balance between work and personal life, along with flexible working options, can positively impact job satisfaction and, consequently, reduce turnover. The study recommends implementing flexible work arrangements and job rotation for ICT personnel in South-West federal universities to help decrease turnover.

Collewet and Sauermann (2017) examined the link between working hours and productivity by analyzing daily data from contact center agents. Their study found a positive correlation between the number of hours worked and the average handling time for calls, suggesting that increased working hours may lead to decreased productivity. The findings underscore that weariness can significantly impact productivity, even in jobs typically staffed around the clock. The study concludes that productivity should be measured by effectiveness and efficiency rather than the sheer number of hours worked, advocating for a focus on task performance rather than just working hours.

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