

INFORMATION COMMUNICATION TECHNOLOGY SKILLS AS PREDICTORS OF GRADUATE EMPLOYMENT IN NSUKKA EDUCATION ZONE OF ENUGU STATE NIGERIA

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Abstract

The study investigated the predictive roles of information communication technology skills on graduate employment in Nsukka education zone of Enugu state, Nigeria. Two research questions posed and two null hypotheses formulated guided the study. The research design used for the study was correlation survey design. The subjects for the study comprised the entire four hundred and sixty postgraduate students in faculty of Education, University of Nigeria Nsukka. The instrument for data collection was two sets of questionnaire titled “ICT Assessment Scale (ICTSAS) and Graduate employment Assessment scale (GEAS). The instrument was developed by the researchers and validated by three experts in faculty of Education, University of Nigeria, Nsukka. The internal consistency reliability coefficient of ICTSAS and GEAS was determined using Cranach alpha and reliability estimate value of 0.81 and 0.79 were obtained for ICTSAS and GEAS respectively. The data collected were analysed using coefficient of determination (R^2) for research one, while multiple regression was used for research question two. The hypotheses were tested at 0.05 level of significance using regression ANOVA (regression output). The result of the study indicates that ICT skills predicate positively the graduate unemployment. Also, the study indicated that ICS skills predicate positively the graduate employment as moderated by gender. In other words, this means that gender did not play any active role in ICT skills on graduate unemployment. The result also revealed that there is a significant relationship between ICT skills and graduate employment in Nsukka Education zone of Enugu state. Based on the finding, it was recommended among others, that secondary school counselors should organize seminars on ICT skills on graduate employment to help reduce the level of unemployment among graduates and this shall certainly leads to sustainable development.

Keywords: ICT skills, Graduate employment.

Introduction

Employment helps in the economic development of a society through provision and expansion of amenities, facilities and welfare services. It utilizes all human and material resources needed to develop a state for the benefits and prosperity of all. Creating employment opportunities is crucial for economic growth and social stability (Toi, 2023). The author also noted that employment provides individuals with the means to support themselves and their families, while also driving consumer spending and boosting local economies. According to World Bank (2023), every 1% increase in employment leads to a 0.6% increase in Gross Domestic Product (GDP) growth. This shows that job creation is not only beneficial for individuals but also for the economy as a whole. As more people have jobs, there is an increase in the demand for goods and services leading to the expansion of business and the creation of more jobs (Michacachi, 2021). With all the benefits of employment, many graduates are unemployed and are moving from one establishment to another looking for employment. Unemployment can lead to a host of social problems including poverty, crime, and social

unrest. Creating employment opportunities helps to reduce these issues, providing people with a sense of purpose and hope for the future (Ryu, 2020). Additionally, having a job can provide individuals with access to healthcare and other benefits, contributing to their personal well being (Nanesh, 2023).

In Enugu State, specifically Nsukka Education Zone, the area of this study, the researchers have observed as counselors that there are many graduates moving from one establishment to another in search of job. Unemployment is extraordinarily high among graduates in the study area with serious mental illness and social problems. This unemployment has led to a host of social problems which include crime, poverty and social unrest. One usually sees graduates in the study area drive taxi and do jobs outside their career to make money. This is a clear indication that graduates in Nsukka Education Zone have no gainful employment. To support the above assertion, rates of unemployment according Mechanic, Bilder and McAlpine (2022), Mueser, Salyers, and Mueser (2021) and under-employment are extraordinarily high among graduates and cause a lot of social problems such as poverty and social unrest. Although numerous studies have focused on employment outcomes in this population (Bond, 2019; Crowther and Cook, 2020 and Huxiey, 2022), only a few have examined the subjective experience of employment in the recovery process. Existing qualitative evidence suggests that people with psychiatric disabilities view work as central to their recovery (Killen & O'oay, 2018; Krupa, 2019; and Mueser, 2021), and experience or anticipate many benefits from working, including increased self-esteem, decreased social isolation and improved quality of life (Salyers, Torrey and Wyzik, 2022). Unemployment is therefore the cause of human instability. Unemployment is a situation whereby persons are capable and willing to work but are unable to find suitable paid employment (Michacachi, 2021). Unemployment is when an individual who is not employed and is seeking employment cannot find work (Toi, 2023). Unemployment is key indicator of the health of an economy. Unemployment in this study is when graduates have no jobs and are seeking employment.

There are many factors that lead to graduates unemployment. Top most on the list is lack of digital technology. Technology has become part and parcel of our daily lives. Also, digital technology in communication no doubt has turned the entire world into a global village. For instance, the advent of internet has taken almost all spheres of social, personal and professional human life. Ezekiel (2016) noted that the advent of internet has made it possible for people to stay connected together using the web provision of information communication technology (ICT). Unfortunately, many graduates lack the skills of information communication technology, which is the yardstick for better employment.

However, there has been a general understanding about the unemployment of graduates in Nigeria and this has been of much concern to stakeholders in education. Aremube (2021) pointed out that lack of employment of many graduates has become an important matter that concern many stakeholders like teachers, educational psychologists, parents, counselors among others. Amudu and Ajoh (2022) identified some factors that lead to graduates unemployment. According to the authors the factors included lack of information communication technology skills, emphasis on certificate, lack of government commitment among others. Kagu (2023) found that ICT skills lead to self-employment. In the same maner, Hart and Keller (2022) noted that graduates with ICT skills gain job in different places and live well in the society. In today's information age, graduates should be able to demonstrate at least the general information communication technology skills. As the use of new technologies spread rapidly, information communication technology skills are already expected of most employees, not only those who choose a career in it (Agu, 2021). Information Communication Technology (ICT) skills are abilities that help you understand and operate a wide range of technology software (Ewskah, 2020). This can include helping users with tasks on computers, such as making video calls, searching on the internet or using a mobile device like a tablet or phone (Ewskah, 2020). ICT

skills can also include any direct interaction with technology, including turning on a computer, using hardware to print and copy documents and using digital cameras to capture photographs or video footage. Some of the ICT skills that one can develop include technological knowledge, online research, social media management, etiquette, data management, desktop publishing, word processing, collaboration, problem-solving and organization (Austin, 2023). ICT skills is the ability to switch on a computer, log in and connect to the appropriate platforms and programs (Nutha, 2021). ICT skills refers to one's ability to converse with people through various technologies (Austin, 2023). In the context of this study, ICT skills refers to graduates abilities to converse with people through various technologies and have gainful employment.

Another factor that could influence unemployment of graduates is gender. Gender is the socially learned behaviours and expectation associated with males and females. Polland and Morgan (2022) conceptualize gender as the socially constructed behavioural expectations for male and female as well as the rights and obligations granted to them by the society. However, gender describes the biological sex of individuals in terms of being male or female (Sterba, 2021). Kiweha (2021) opined that gender refers to the social attributes and opportunities associated with being male and female, the relationship between women and men, girls and boys. The author went further to note that these attributes, opportunities and relationship are socially instructed and are learned through socialization process. Thus, gender is the classification of characteristics distinguishing between male, masculinity and female, femininity. In Nigerian societies, there are differences and inequalities between women and men in responsibilities assigned, activities undertaken, access to, among others. The study of gender has attracted the interest of researchers today, especially as it relates to ICT skills and employment opportunities (Dhull and Buniwal, 2020). There are behavioural expectations from male and female in our society. According to Eze (2021), male and female graduates exposed to ICT skills gain employment equally. Also, Chan (2022) noted that both male and female graduates who are exposed to ICT skills usually get job after the acquisition of the skills. It is on this note that the researchers are interested on gender to find out whether ICT skills can predict graduate unemployment.

In Enugu State, Nigeria, specifically Nsukka Education Zone, there are many graduates without employment. Unemployment is very high among graduates in the study area. In spite of efforts made to reduce this ugly situation, it is still on the increase. It is based on this background that the researchers sought to investigate ICT skills as predictors of graduate unemployment in Nsukka Education Zone of Enugu State, Nigeria.

The study's main objective was to investigate ICT skills as predictors of graduate employment in Nsukka Education Zone of Enugu State, Nigeria.

Specifically, the study sought to:

- (1) determine the relationship between ICK skills and graduate unemployment.
- (2) determine the relationship between ICT skills and graduate unemployment as moderated by gender.

The following research questions posed guided the study:

- (1) What is the relationship between ICK skills and graduate unemployment?
- (2) What is the relationship between ICT skills and graduate unemployment as moderated by gender?

The following hypotheses formulated guided the study at 0.05 level of significance

H₀₁: There is no significant relationship between ICT skills and graduate unemployment.

H₀₂: There is no significant relationship between ICT skills and graduate unemployment as moderated by gender.

Method

The research design used for the study was a correlation survey design. The population for the study was all the 460 postgraduate students in Faculty of Education, University of Nigeria, Nsukka. The entire population of 460 postgraduate students were used as the sample. In this case, there was no sample. This is because the number can be managed. The instrument used for data collection were two sets of questionnaires titled “ICT Assessment Scale (ICTSAS) and Graduate Unemployment Assessment Scale (GUAS). ICTSAS and GUAS were properly validated by three experts in the Faculty of Education, University of Nigeria, Nsukka. The internal consistency reliability coefficient of ICTSAS and GUAS were determined using Cronbach alpha statistics and reliability estimate value of 0.81 and 0.79 were obtained for ICTSAS and GUAS respectively. The data collected were analyzed using simple linear regression for research question one while multiple regression was used for research question two. Hypotheses were tested at 0.05 level of significance using regression ANOVA (regression output).

Results

Research Question One: What is the relationship between ICK skills and graduate unemployment?

Table 1: Linear regression analysis on the relationship between ICT skills and graduate unemployment

Variables	R	R ²
ICT skills and graduate unemployment	0.81	0.66

R² = Coefficient of Determination

The result on Table 1 shows the relationship between ICT skills and graduate unemployment. The result shows that the correlation coefficient (R) obtained between ICT skills and graduate unemployment was 0.81. This shows that there is a very high positive relationship between ICT skills and graduate unemployment. Furthermore, the coefficient of determination associated with the correlation coefficient of 0.81 was 0.66. The coefficient of determination shows that 66% variation in graduate unemployment is attributed to lack of ICT skills. This implies that 34% variation in graduates' unemployment can be attributed to other variables other than ICT skills.

Research Question Two

What is the relationship between ICT skills and graduate unemployment as moderated by gender?

Table 2: Regression analysis of the relationship between ICT skills and graduates unemployment as moderated by gender

Model Variable	N	R	R ²
Gender			
Male	220	0.74	0.55
Female	240	0.87	0.76

(R²) = Coefficient of Determination

In order to answer the above research question, the scores from male and female graduate on ICT skills were correlated with their unemployment. The result in Table 2 shows that correlation coefficient (R) of 0.74 and 0.87 with associated coefficient of determination (R²) of 0.55 and 0.76 were obtained for the male and female graduates respectively between their ICT skills and unemployment. These coefficients of determination (R²) indicated that 55% variation in graduates' unemployment was due to lack of ICT skills for male while 76%

was due to lack of ICT skills for female. The difference in the variation of male and female graduates' unemployment as correlated with ICT skills was 21% in favour of female. Hence, gender moderated 21% of the relationship between ICT skills and graduate unemployment in favour of female. This implies that gender moderated 21% of the relationship between ICT skills and graduate unemployment.

Hypothesis One: There is no significant relationship between ICT skills and graduate unemployment.

Table 3: Regression analysis significant between ICT skills and graduate unemployment

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.211	1	.212	1.000	.002
Residual	61.213	459.459	.131		
Total	61.195	460			

The result on Table 3 shows that an F-ratio of 1.000 with associated exact probability value of 0.002 is less than 0.05. Thus, the null hypothesis was rejected. The researchers therefore conclude that there is a significant relationship between ICT skills and graduate unemployment.

Hypothesis Two: There is no significant relationship between ICT skills and graduate unemployment as moderated by gender.

Table 4: Multiple regression analysis of the relationship between ICT skills and graduate unemployment as moderated by gender

Source	df	Adj ICTS	Adj GU	F-value	P-value
Regression	2	4004.2	1001.05	21.41	0.000
ICT Skills	1	1116.3	1116.28	23.88	0.000
Gender	1	16.4	10.37	0.22	0.638
Error	358	15989.5	46.75		
Lack of fit	320	15221.1	48.02	1.56	0.091
Pure Error	27	768.7	30.75		
Total	61.195	460			

The result on Table 4 shows that F-ratio of 0.22 with associated exact probability value of 0.638 was obtained. This probability value of 0.638 was compared with 0.05 set as level of significance for testing the hypothesis and it was found to be significant because 0.638 is greater than 0.05. Hence, the null hypothesis of no significant relationship was not rejected. The researchers therefore conclude that there was no significant relationship between ICT skills and graduate unemployment as moderated by gender.

Discussion of Findings

The result shows that the correlation coefficient of graduates was high. This means that there exists a high positive relationship between ICT skills and graduate unemployment. By implication, it means that the coefficient of determination with a high percentage variation in the unemployment of graduates can be attributed to lack of ICT skills. It also showed that increase in ICT skills predicates positively employment of graduates.

Further analysis of the relationship between ICT skills and graduate unemployment revealed that at the associated probability for the calculated value of F, is less than the level of

significance, the null hypothesis was rejected. This implies that there is a significant relationship between ICT skills and graduate unemployment.

The findings of this study is in support of the study of Kagu (2021) who carried out study on ICT skills and self-employment and found out that ICT skills lead to self-employment. In the same vein, Hart and Keller (2022) noted that graduates with ICT skills gain job in different places and live well in the society. The findings of this study showed that ICT skills predicates graduate employment. The findings suggest that graduate should equip themselves with ICT skills to gain better job in the society.

The findings also show that correlation coefficient between ICT skills and graduates unemployment as moderated by gender was high. This means that there exist a high positive relationship between ICT skills and graduate unemployment of male and female. By implication, it means that the coefficient of determination with a high percentage variation in graduate unemployment is attributed to lack of ICT skills.

Further analysis of the relationship between ICT skills and graduate unemployment revealed that at associated probability for the calculated value of F is greater than the level of significance, the null hypothesis was accepted. This implies that there is no significant relationship between ICT skills and graduate unemployment as moderated by gender.

The findings of this study is in agreement with the study of Eze (2021) who noted that male and female graduates who were exposed to ICT skills gain employment equally. In the other hand, Chen (2022) noted that both male and female graduates who are exposed to ICT skills usually get jobs after the acquisition of the skills. The findings of this study showed that ICT skills predict graduate employment. This finding suggests therefore that graduates should acquire ICT skills for gainful employment.

Conclusion

The research emanated from the need to seek solution to unemployment of graduates. Consequently, the study investigated ICT skills as predictors of graduates' unemployment. The study revealed among others that positive relationship exist between ICT skills and graduate unemployment. Therefore, ICT skills should be encouraged at undergraduate levels to enable them gain employment after school.

Implication of the Findings

The result of the study revealed that among others that ICT skills predicts positively graduate unemployment. By implication, graduates should acquire ICT skills for gainful employment.

Recommendations

- (1) School counsellors should guide and inform graduates to acquire ICT skills for gainful employment.
- (2) School counsellors should organize workshop and seminar on ICT skills as predictors of graduate unemployment.

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