

**DEMOGRAPHICS, INFORMATION AND COMMUNICATION TECHNOLOGY  
SKILLS, ACCESS AND USE AS FACTORS INFLUENCING TASK PERFORMANCE  
OF LIBRARY PERSONNEL IN PUBLIC UNIVERSITIES IN SOUTHWESTERN NIGERIA**

**BY**

**WURAOLA JANET OYEDIPE  
B.A.Ed. English (Ilorin)MLS (Ibadan)  
MATRIC NO: 63784**

**A Thesis in the Department of Library, Archival and Information Studies,  
Submitted to the Faculty of Education  
in partial fulfillment of the requirements for the Degree of  
DOCTOR OF PHILOSOPHY  
of the  
UNIVERSITY OF IBADAN**

**JANUARY, 2020**

## **CERTIFICATION**

I certify that this work was carried out by **Wuraola Janet OYEDIPE** (Matric number **63784**) at the Department of Library, Archival and Information Studies, Faculty of Education, University of Ibadan, under my supervision.

---

**Prof. S.O. Popoola**

B.Sc (Nig.), MLS(Ibadan), PhD (Ibadan)

Department of Library, Archival and Information Studies,

University of Ibadan.

## **DEDICATION**

I dedicate this work to the King of kings and the Lord of Lords, the giver and the sustainer of life, who gave me a second chance to live and complete this work. Glory and adoration to His Holy name. To my husband, who sacrificially nursed me back to health and provided the conducive atmosphere to carry out the study. To my darling children, IfeJesuposimi, Ayodeji, Olamide and Boluwatife, who sacrificed so much for me to be able to complete this thesis.

## ACKNOWLEDGEMENTS

I thank the Almighty God, the beginner and finisher of my faith for his abiding presence throughout the duration of this work. I want to appreciate my late parents, Late Alhaji O. A. and Alhaja O. S. Abayomi, whose decision to send me to school against all odds set the template for this achievement. I wish to use this opportunity to thank my supervisor Professor S. O. Popoola, immensely for providing me with the necessary guidance to carry out this work. Without his guidance this work might not have been completed. I also wish to thank Dr. Airen Adetimirin, for her guidance which provided me with the right template to start off the research, her encouragement is greatly appreciated. My gratitude goes to lecturers in the Department of Library, Archival and Information Studies who contributed in no small measure to the success of the work: Prof. I. Mabawonku, Prof. G. O. Alegbeleye, Prof. K. I. N. Nwalo, Prof. O. A. Okwilagwe, Dr. A. A. Abioye, Dr. C. A. Akangbe, Dr. J. K. Apotiade, Dr. O. E. Igudia, Dr. A. J. Alonge, Dr. P. O. Olajo, Mr. O. O. Folorunso, Dr. B. M. Oweghoro, Mrs. E. N. Emeahara, and other members of staff in the department. My special thanks to Prof. O. A. Adegbesan, Dr. A. Tella and Dr. A. K. Taiwo from the Faculty of Education for their intellectual input into the work.

I also want to thank my colleagues who assisted me to administer the questionnaire in their various university libraries, Dr. B. A. Ajiboye, Dr. Bankole O. B., Mr. O. Awonusi, Mrs. B. Olatise and Mrs. S. Nduka. I want to appreciate them for their hospitality and care during field work and for their assistance. I want to thank my friends Dr. I. N. Ohia and Barrister T. N. Ohia, Mrs. Bukonla Alade, Mrs. I. Aremu and Dr. F. T. Olanrewaju for their encouragement. I want to appreciate my former boss, Mrs. F. A. Oyesiku, for her understanding and immense support for me during the trying period when I was indisposed while pursuing this goal. My appreciation goes to my leader at work, Dr. A. A. Oduwole, the University Librarian of Olabisi Onabanjo University, Ago-Iwoye, for his understanding and support. Also, my appreciation goes to my colleagues at work, Mrs. O. S. Okewale, Mrs. S. R. Adekunmisi, Mr. Olayinka Buraimo, Mr. and Mrs. M. L. Abdul, Mrs. Adenike Ajayi and others too numerous to mention.

My deepest regard goes to my brother, Mr. Abdul Abayomi for his unalloyed support and fatherly role at every point in time. Special thanks to my immediate family members, Mr. A. J. Oyedipe, Ife Jesu, Ayodeji, Olamide, Boluwatife, my daughter-in-law, Oluwaseyifunmi and my son-in-law, Stephen Emeroh for supporting me immensely, all through the duration of the study. I want to thank my extended family members, Mrs. S. A. Afuwape, Mr. A. S. Abayomi, Mrs. A. Omosanya, Mr. M. K. Abayomi and Mrs. A. R. Irene and others too numerous to mention, who understood what I was going through while on this course. I thank my amiable cousin, Dr. Dele

Womiloju, for her kind gesture and support. My special appreciation goes to my brother in law, Yinka Oyemade, for rising up to the challenge when his help was needed most as my research assistant. I want to appreciate my Senior Pastor Rev. Oluwaniran Isaac, for his support and prayers.

I am also appreciative of Mrs. M. O. Aladeyelu for her understanding and help in typing whenever the needs arose and Mrs. B.M. Adeleye for her tolerance and accommodating spirit. Finally, my gratitude goes to my respected analyst, Late Pastor Ayo Odewunmi, who worked so hard to analyse the data and whose death was a rude shock. May he find rest in the bosom of the Lord. Above all, I thank God, who enabled me to cross the hurdles and challenges that arose at each critical stage of this work, to Him be the Glory and adoration forever, Amen.

## ABSTRACT

Task Performance (TP), the proficiency with which Library Personnel (LP) performs their core functions (acquisition, cataloguing and classification, preservation, storage and retrieval of information materials), requires the deployment of information and communication technology for efficient service delivery in the library. However, the way services are rendered by library personnel to library users is often hindered by the state of information and communication technology prevalent in libraries which results in users' dissatisfaction. Past studies focused on job satisfaction, work motivation, and job performance of university LP without paying much attention to the influence of demographics, ICT Skills (ICTS), ICT Access (ICTA) and ICT Use (ICTU) on (TP). This study, therefore, examined the demographics (age, gender, marital status, educational status, work experience, job status and income), ICTS, ICTA and ICTU as factors influencing TP among LP in public universities in southwestern Nigeria.

Campbell Theory of Job Performance guided the study, while survey design of correlational type was adopted. Thirteen public university libraries that were in session during the time of data collection were purposely selected. Three hundred and thirty LP in the 13 public university libraries in the southwestern Nigeria were enumerated. Structured and validated instruments, comprising ICTS ( $r=0.96$ ), ICTA ( $r=0.91$ ), ICTU ( $r=0.88$ ), and TP ( $r=0.97$ ) scales, were used. Data were analysed using descriptive statistics, Pearson product moment correlation and Multiple regression at 0.05 level of significance.

Respondents age was  $42.70 \pm 8.72$  years; 66.9% were married, 33.1% single; 65.7% were male, 57.7% librarians, 42.3% library officers and their working experience spanned  $28.70 \pm 3.60$  years. Respondents' level of income 53.2% was moderate, while their educational status was distributed as follows: Ph. D (6.5%), Master's degree (50.4%), Bachelor's degree (14.5%) and Diploma (28.6%). The TP ( $\bar{x}=222.68$ ), ICTS ( $\bar{x}=80.91$ ), ICTA ( $\bar{x}=43.58$ ) were high while ICT use was moderate ( $\bar{x}=47.97$ ) against the thresholds of 166, 80, 43 and 52, respectively. Gender ( $r=0.99$ ), age ( $r=0.10$ ), marital status ( $r=0.19$ ), work experience ( $r=0.92$ ), educational status ( $r=0.49$ ), income ( $r=-0.33$ ) and job status ( $r=0.65$ ); and ICTS ( $r=0.33$ ) ICTA ( $r=0.34$ ) and ICTU ( $r=0.13$ ) had significant relationships with TP. Age, gender, marital status, work experience, educational status, income, job status, ICTS, ICTA and ICTU had significant joint contribution to TP, ( $F_{10;246}=5;34$ );  $\text{Adj.}R^2=0.13$ ), accounting for 13.0% of its variance. Age ( $\beta=0.07$ ); marital status ( $\beta=0.14$ ); work experience ( $\beta=0.14$ ); educational status ( $\beta=0.08$ ); ICTS ( $\beta=0.35$ ); ICTA ( $\beta=0.02$ ) and ICTU ( $\beta=0.47$ ) contributed to TP; while gender, job status and income did not.

Demographic variables, information and communication technology skills, access and use influenced task performance of library personnel in public universities in southwestern Nigeria. Library managers in public universities should pay attention to these factors and promote ICT skills among library personnel.

**Keywords:** Task performance, Library personnel, Information and communication technology, Accessibility, Public university libraries in Nigeria

**Word count:** 434

## TABLE OF CONTENTS

Title Page	i
Certification	ii
Dedication	iii
Acknowledgements	iv
Table of Contents	v
Abstract	vii
List of Tables	viii
List of Figures	x

### CHAPTER ONE: INTRODUCTION

1.1 Background to the study	1
1.2 Statement of problem	13
1.3 Objectives	14
1.4 Research questions	15
1.5 Hypotheses	16
1.6 Scope of study	16
1.7 Significance of study	17
1.8 Definition of terms	18

### CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction	19
2.2 Task performance of library personnel in universities	19
2.3 ICT skills possessed by library personnel in universities	28
2.4 Access to ICT facilities by library personnel in universities	32
2.5 ICT Use by library personnel in university in universities	35
2.6 Demographics and ICT skills of library personnel in universities	41
2.7 Demographics and ICT use by library personnel in universities	42
2.8 Demographics and task performance of library personnel in universities	44
2.9 ICT skills and task performance of library personnel in universities	51
2.10 Access to ICT and task performance of library personnel in universities	55

2.11	ICT use and task performance of library personnel in universities	57
2.12	Theoretical framework	61
2.13	Conceptual model	62
2.14.	Appraisal of the literature reviewed	65
<b>CHAPTER THREE: METHODOLOGY</b>		
3.1	Introduction	66
3.2	Research design	66
3.3	Population of the study	66
3.4	Sample size and sampling technique	67
3.5	Research instrument	67
3.6	Validity and reliability of the instrument	69
3.7	Data collection procedure	69
3.8	Method of data analysis	70
3.9	Ethical consideration	70
<b>CHAPTER FOUR: RESULTS AND DISCUSSIONS</b>		
4.1	Introduction	71
4.2	Questionnaire distribution and response rate	71
4.3	Demographics distribution	73
4.4	Analysis of the research questions	81
4.5	Hypotheses	111
4.6	Discussion of findings	115
<b>CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS</b>		
5.1	Introduction	129
5.2	Summary of findings	129
5.3	Conclusion	130
5.4	Implication of the study	130
5.6	Recommendations	131
5.7	Contribution to knowledge	132
5.8	Suggestion for further research	132
	References	133
	Appendices	159

## LIST OF TABLES

Table 3.1:	Population of library personnel in public universities	67
Table 4.1	Questionnaire distribution and Response rate	71
Table 4.2a:	Level of ICT skills of library personnel in public universities	79
Table 4.2b:	Test of norm for level of ICT skills of library personnel in public universities	80
Table 4.3a:	Level of access to ICT facilities used by library personnel in public universities	81
Table 4.3b:	Test of norm for level of access to ICT facilities available to library personnel	82
Table 4.4a:	Frequency of ICT use by library personnel in public universities	83
Table 4.4b	Test of norm for level of ICT use by the library personnel	84
Table 4.5a	Task performance of librarians based on self-evaluation	85-86
Table 4.5b	Supervisors' evaluation of librarians' task performance	88-89
Table 4.5c	Overall summation of librarians' task performance	91-92
Table 4.5d	Test of norm for the level of task performance of librarians	93
Table 4.6a	Task performance of library officers based on self evaluation	94-95
Table 4.6b :	Supervisors' evaluation of library officers' task performance	97-98
Table 4.6c	Overall summation of library officers' task performance	100-101
Table 4.6d	Test of norm for level of task performance of library officers	102
Table 4.7a	Overall summation of library personnel task performance	103-104
Table 4.7b	Test of norm for level of task performance of library personnel	108
Table 4.8	Relationship among demographics and ICT skills and use among library personnel in public university	106

Table 4.9	Relative influence of demographics, ICT skills, ICT access and use on task performance of the respondents in public university	107
Table 4.10	Significant relationships among demographics (gender, age, marital status, education status, work experience, job status, and income level), ICT skills, access and use on task performance of respondents	108
Table 4.11	Joint contribution of the demographics, ICT skills, ICT access and ICT use on task performance	109
Table 4.12	Mean and standard deviation scores on task performance, ICT skills, access and use of library personnel in public universities	110

## **LIST OF FIGURES**

Figure 2.1:	Conceptual model of task performance of library personnel	64
Figure 4.1:	Distribution of respondents by gender	73
Figure 4.2:	Distribution of respondents by age group	73
Figure 4.3:	Distribution of respondents by marital status	74
Figure 4.4:	Distribution of respondents by educational qualification	75
Figure 4.5:	Distribution of respondents by work experience	75
Figure 4.6:	Distribution of respondents by job status	78-76
Figure 4.7:	Distribution of respondents by income	77
Figure 4.8:	Distribution of respondents by departments in the Library	78

## **LIST OF ACRONYMS**

- ICT: Information and Communication Technology
- ICTS: Information and Communication Technology Skills
- ICTA: Information and Communication Technology Access
- ICTU: Information and Communication Technology Use
- TP: Task Performance
- OCB: Organisation Citizenship Behaviour
- OPAC: Online Public Access Catalogue
- LAN: Local Area Network
- LC: Library of Congress
- WAN: Wide Area Network
- MAN: Metropolitan Area Network
- HTML: Hypertext Markup Language
- SGML: Standard Generalised Markup Language
- LIS: Library Information Science
- TCP: Transmission Control Protocol
- IP: Internet Protocol Address
- SMS: Short Messages Service
- UPS: Uninterrupted Power Supply

## **APPENDICES**

Appendix I: Questionnaire on demographics, ICT skills, access and use as factors influencing task performance among library personnel in public universities in southwestern Nigeria.

Appendix II: Reliability analysis

Appendix III: Turnitin digital Receipt

## CHAPTER ONE

### INTRODUCTION

#### **1.1 Background to the study**

The impact of the university library in the storage, preservation, dissemination and utilisation of knowledge is highly unquantifiable. Even in the face of emerging technologies such as the Internet, the university library is still highly relevant to students, lecturers and researchers in the university community. Accreditation of courses in the university depends on standardised and well-equipped university library without which no programme would scale through (Okogwu and Akidi, 2011). This shows that academic excellence in any university requires quality library, which cannot be achieved without good personnel. In a bid to carry out effective tasks in the library by its personnel, the university library is divided into different units with different task schedules. These are technical, serials, readers, media, and administrative units. These units carry out various tasks that will ensure the achievement of library goals.

Personnel in the library are essential resources that enable librarians to achieve the purpose for which they are established. Their level of output determines a library's success or failure. Library personnel are essential resource required for the functionality of any university library, (Tharku and Sharma, 2010) Human resources are one of the three resource components that sustain the library. Others are finance and materials. According to Ali (2013), 'systems, procedures, theories, and organisational culture' will be useless if the human resource is not considered important (P.82). This implies that library personnel are very important for library viability. Library personnel are essential to the creation of whatever impact the library is expected to have on the users' community, and as such they must be given the appropriate attention expected to enable them to perform at their best.

Personnel in the university library are responsible for coordinating the physical and the material resources to achieve university library goals and objectives. Their performance is essential and vital for achieving overall library performance. Personnel in university library are expected to perform their assigned tasks creditably, so as to impact positively on the university community. However, maximum performance is achievable by library personnel when the university library provides the needed tools and the right atmosphere to perform assigned tasks. Amusa (2013) described work environment comprising technical, human and organisational as being crucial to employee performance. Personnel performance in the library can also be influenced by individual ability, work situation around them, and the nature of work itself. Staff

performance is therefore vital to the achievement of overall library goals and by implication enables the achievement of the university mission and vision.

Library personnel consist of librarians, library officers, attendants and administrative staff. Librarians are the core professionals in the library. They head and direct the affairs of each unit of the library: administration, technical, serials, circulation, multimedia and they perform core functions which include liaison with faculty in selecting appropriate materials needed for acquisition, cataloguing and classification of library materials, circulating resources among users, retrieving and disseminating information. The identified tasks also consist of sub-tasks such as actual purchase, documentation, and organisation. Apart from these, librarians are responsible for planning, organising and supervising subordinates.

Library officers are regarded as middle-level manpower whose task is to complement the librarian's effort. Library officers are designated as paraprofessionals, library assistants, library specialists, library associates, and others. This category of officers play major role in information dispensation in the library. Library officers occupy strategic position in the university library job hierarchy. They are the customer relation officers of the libraries because they are the first to be encountered by the users. Library officers perform core functions too as directed by librarians. Some of the functions of library officers include, vetting of cards, card sorting, card filling in catalogue and cardex in case of journals, compilation of journal list and supervision of library attendants. James, Shamchuck, Koch (2015) identified some tasks performed by library officers, and these are; resources repair, copyright control, placing holds, helping users to locate materials, answering users questions relating to library policy, assisting in collection management and supervision. Though most of these are manual-based, the adoption of ICT brought about the expansion of these functions, which include; educating and assisting users with Online Public Access Catalogue (OPAC), copying of classification numbers and assisting users with electronic resources usage.

According to Zhu (2011), the emergence of ICT has brought about new tasks and new job responsibilities in libraries. This has led to job rescheduling and realignment, which result in the need for job up skilling for library officers. Some of the job tasks usually associated with librarians are now being handled by library officers. These include copy cataloguing and, in some instances, original cataloguing. The '*modus operandi*' by which library officers perform their line functions can impact positively or negatively on overall library wellbeing. Library attendants provide support services to librarians. Tasks performed by them include providing financial

guide, rendering secretarial services and carrying out other assignments as delineated by the university librarian.

Performance is the extent to which personnel meet their job requirement specifications. That is the ability to meet stipulated job target within quantifiable time limit. Library personnel performance is important in the attainment of library goals and the determination of library effectiveness. Staffs are expected to perform job responsibilities over and above expectation to enable the library achieve its goals and objectives. One of the responsibilities of the public university library is to make positive impact on the academic and research activities of members of the academic community, therefore, it is important that personnel possess job knowledge, job skills, creative and adaptability skills to be able to impact positively on their users. Since library personnel actions and in-actions can impinge on academic excellence of the university community; library personnel must perform their library tasks well, and to do this, requires appropriate facilities and conducive atmosphere. The provision of appropriate ICT facilities would facilitate effective task performance in the university library, while lack of tools would leave library personnel frustrated and disenchanted (Cascio, 2006).

Library personnel performance can be assessed based on factors such as clarification of goal, skills, abilities, experiences, understanding of structures and facilities which consists of tools and equipment, competing priorities, and non-repressive leadership climate (Nickols, 2016). Library personnel performance could be a determinant of library effectiveness. Poor task performance by library personnel can be associated with inability to meet users expectations, non completion of assigned tasks timely, while good performances can be said to go beyond all expectations on any assigned responsibilities. Since high level and quality performance is expected from library personnel by library managers, regular assessment of library personnel would engender good tasks performance; and this will to a large extent, correct the deficiencies that have been highlighted in literature concerning the performance of library personnel generally in public university libraries in Nigeria.

Task performance, which is described as the behaviour an employee manifests in work situation in order to earn an income is very crucial to library effectiveness. Miao (2011) describes it as duties and responsibilities expected of an employee which enables them to earn a remuneration. He referred to task performance as a formal job description. Task performance can be looked at from different perspectives. Peng (2011) described task performance as formal activities within a job which is fundamentally required as part of the organisation technical

requirement. Task performance can be viewed as routine, adaptive and creative in nature. It is the basic requirement in any job which is fundamentally an in-role responsibility.

Task performance of library personnel is mandatory in nature and not based on preferences. It has to do with the content of one's job description which is what employees are paid to do. Sonnentag, Volmer and Spychalla (2010) described task performance as actions or operations of individual employee that are spelled out by employer in job contract and which is binding on employee. The study considered task performance as a product of ability while Palumbo, Miller, Shalin, and Steele-Johnson (2005) viewed task performance as being determined by job knowledge rather than cognitive ability. Task performance from the library purview can be referred to as actions and behaviour which library personnel exhibit in the process of carrying out duties and responsibilities.

Library personnel carry out different tasks to achieve library objectives. Library tasks are duties and responsibilities which must be carried out by personnel to achieve library goals. In other words, tasks are what the individual does in a work setting. Before library materials could be accessible to users in the university library, such materials would have to undergo certain processes and procedures which consist of procurement, documentation, cataloguing, classification, and organisation. These are major library tasks under which there are many other sub tasks which include selection and acquisition of materials, serial sourcing and control, answering reference question, circulation of library materials, sourcing and guiding e-resources use. While some of these tasks are routine in nature, some require the demonstration of adaptive behaviour, that is, ability to use technology in execution of tasks.

Possession of task knowledge and skills will automatically influence task performance of library personnel, which will automatically affect library performance as a whole. When tasks are carried out qualitatively and timely, it enables the achievement of goals and objectives. In the library environment, library work is complimentary in nature that is, there is overlapping of tasks between one unit and the other, and the non-completion of assigned tasks in one unit has consequences on task performance in another unit. Insolvency in the execution of assigned tasks would result in low performance and users' dissatisfaction, while the ability to complete assigned tasks, duties and responsibilities timely result in high performance and user's satisfaction.

In order to quantify performance generally, researchers have used different modalities to describe performance. Some quantified library personnel's performance as 'excellent, very good, good, fairly good, very fair, and poor' (Amusa, Iyoro and Ajani, 2013). Others used 'very satisfactory, fairly satisfactory, and satisfactory respectively' (Maripaz, Ombra and Osman, 2013).

Assessment of performance by library management helps in identifying employees that are contributing to the success of the university library in terms of qualitative and quantifiable input and output. It is equally useful for identifying those that need to be propped up or helped to enable them possess the necessary attributes that would enable them to contribute maximally to the achievement of overall library objectives.

Assessment of performance help to determine the strength and the weakness of personnel so as to allow appropriate measures to be taken to help weak personnel attain high-level performances on the job and to reward high and better performance among personnel. This was corroborated by Okpe(2012) which reiterated that staff performance can be measured either against set standard or for developmental purposes. Feedback from assessment of performance therefore is important in tackling any deficiency identified during assessment. Therefore, feedback plays major role in enhancing employees' performance because of its usefulness for encouraging continuous improvement for the purpose of achieving effective task performance. Feedback also help employee to bridge whatever gaps that might be identified during assessment. Nickols (2016) stressed the fact that feedback from performance stimulates progress, allows corrective measure to be taken by personnel which eventually boil down to the achievement of organisation goals. Periodic assessment of performance can be described as a means of improving personnel performance. This should be based on the key performance indicators set up by the library. Iroaganachi and Nikko (2016) identified leading and lagging performance indicators as 'plan, schedule, operate, manage and maintain people, functions and systems' (P.8).

Job description strategy is an important way of measuring personnel assessment since what employee does and how this is done are important in gauging his/her effectiveness. Job description specifies what is expected of personnel in the line of duty. Duties and responsibilities are spelt out so that employee would have a clearer view of performance expectations and deadlines. This will engender effective and efficient task accomplishment within the university library. Most often, job responsibilities are not clearly spelt out leaving critical gap which affects both performance and outcome of performance of personnel. However, library personnel must possess adequacy of job knowledge, procedural skills, communication competence, creativity, and managerial skills to optimise their performance. Job knowledge refers to information that has to do with job tasks, duties and responsibilities, while job skills has to do with procedural knowledge required for effective performance of tasks, duties and responsibilities. Job knowledge

can be described as work practices, policies, procedures as well as technical information that is, facts and procedures, needed for performing job tasks.

Also, of importance is library personnel's capability to communicate distinctly and effectively. Communication competence is required for effective flow and comprehension of information, (Asamu, 2014). Communication gap has led to stakeholders within the Nigeria university system having to complain of lack of impact of the library on faculties' publishing in spite of the huge budget of the university library. Some literature reviewed by (Saka, Oyedum and Song, 2016) established the fact that performances of library staff in Nigeria is low. Low performance by library personnel would result in poor service delivery and users' dissatisfaction. Several factors could be responsible for low performance among library personnel. Such factors include lack of job specifications, uneven distribution of available fund, personal problems, enacting policies that do not give clear directions and lack of appropriate financial reward that commensurate with personnel input. These can be regarded as situational constraints within the library environment that can prevent library personnel from maximising their potentials.

Other factors that may affect library personnel task performance and which have the capacity to influence personnel disposition to duties and responsibilities are their demographic characteristics, level of ICT skills possessed by library personnel, ICT access, and ICT use. The individual characteristics of library personnel may exert some level of influence on their performance. Necessary awareness of these characteristics and traits and the way they are controlled personally and by management can impact positively on personnel performance. Demographics are human characteristics made up of age, gender, marital status, educational status, work experience, job status, and income. Sonnentag, Volmer and Spychalla (2010) referred to demographics as person specific factors.

Age distribution of personnel is vital for overall performance of organisation. It has been affirmed that older personnel do not function effectively as the younger ones (De Koning and Gelderbloom, 2006). Though this may be due to decline in their physical capability as well as their mental capacity, nevertheless, it is believed that as one ages, the level of both physical and mental capacity reduces, thus limiting one's capability to deliver on a given mandate. Tasks requiring physical energy may be difficult for older personnel due to decrease in physical agility but simpler for younger personnel. However, personnel, in terms of young and old, possess attributes that can impact positively on their task performance when carrying out duties and responsibilities in the university library. These two categories of personnel need to be captured by organisation in its pool of human resources.

Gender is another construct that is concerned with the differences between masculine and feminine roles within the society. Gender refers to societal imposed differentiation of roles between male and female, (Gberevibie, Osinbanjo, Adeniji and Oludayo, 2014). While society attributes tough, energy-required tasks to the male gender, the female gender is associated with soft tasks. It is expected that male and female differs both physically and psychologically, and this might play very significant role in their performance in employment. Sociologically, it is believed that males can outperform the females on any assigned duties. This may not necessarily be, just as Tiraieyari and Uli (2011) insisted that gender differences in performance might result from the nature of tasks they are involved in.

Males are regarded as hard working and career-minded compared to their female counterpart. While the male is single-minded about career, the female is regarded as been too preoccupied with the home front at the expense of career (Buddhapriya, 2009). From biological and sociological point of view, gender may predict task performance of library personnel. This societal categorisation of performance among male and female is culturally biased. This cultural bias is a reflection of societal beliefs rather than the reflection of major differences between the male and the female (Ogunleye and Osekita, 2016). Practically, male and female are not significantly different if both are placed on the same criteria when evaluated. Today, differences between male and female are disappearing fast, as males and females are overcoming limitation imposed on them by society in the job market. In the library, male and female constitute a dominant workforce; therefore, predicting the effect of gender on task performance of library personnel might improve efficiency and effectiveness in the library.

Marital status is a construct, which has to do with whether one is single, married, separated, widowed, or divorced. Marital status of personnel can affect their performances on the job. This is because the responsibilities associated with being married are enormous; and if care is not taken, it could limit one's performance on a job. Marriage responsibilities may affect women more than men and can also have implication for their task performance. The challenges posed by the multi-tasking activities that married women are involved in may actually affect their level of task performance on the job.

Another demographic factor that can affect library personnel's task performance is their educational status. Educational status indicates the academic qualification of library personnel. It can be described as academic credentials of an employee (Ng and Feldman, 2009). Educational status is a determinant of cognitive ability of the individual as well as an indicator of the knowledge and skills possessed by individuals. Employees seek to upgrade their knowledge

because educational status determines their level of operations and this equally determines their remuneration. Educational levels play major role in task allocation in the library because it determines who does what in terms of task allocation. Management and core tasks are assigned to librarians and library officers, while routine tasks are given to library attendants. The educational status of library personnel may actually determine their task performance.

Work experience is an indicator of the level of job knowledge and job skill acquired on a job. It is an indicator of previously acquired knowledge and skills while working. Work experience is equally a demonstration of practically acquired competence on a job. The job knowledge and the skills required to perform job tasks is acquired educationally during years of service. Application of knowledge in relevant situational context generates experience, while experience can be described as knowledge gained from how tasks are performed. The higher one goes in career development, the higher the competence acquired on the job. The longer one stays on a job, the more effective one becomes. Work experience is an important factor in employment and job selection, as result of its influence on the performances of individuals. Knowledge gained from experience is referred to as tacit knowledge, and this could be very useful to individuals on the job. Work experience has been found to correlate with task performance and productivity rate of library personnel (Quareshi, Bashir, Saleem, Javed, Sadat and Safdar, 2013).

Both education and experience determine the job status of library personnel. Job status has to do with placement within organisation's hierarchy. Status gives individual personnel a sense of duty and responsibility. It equally determines the worth of individual in terms of income and remuneration. Job placement is categorised differently in all professions hierarchically. This categorisation ascribes job status to all employees, and it is expected to inspire performance by stimulating the desire to move from one cadre to another. Job status has the capacity to motivate or demotivate. It is used by libraries as a kind of incentive to prompt staff into higher achievement. Library personnel status is enhanced by promotion from one cadre to the other which results in higher income. Furthermore, categorisation of status can often lead to docility and complacency if employee does not have the opportunity to move up the career ladder on merit.

Promotion and income are regarded as extrinsic motivational factors which may affect library personnel task performance positively or negatively. Income can be described as money received as a result of one's contribution to an organisation. It is a kind of financial reward for employee's performance. Monetary income plays vital role in the determination of employee's performance because it determines employees' worth. Good remuneration could be associated

with increase in workers performance. A good income is capable of attracting, retaining, and motivating library personnel for effective task performance (Young, Miller, Edmund, Pentsil and Bronan, 2014).

Apart from these individual characteristics, another factor that can affect performance of public university library personnel on the job is the state of ICT prevalent in university libraries, which consists of ICT skills, access and use. ICT has been described as the convergence of computer, hardware and software) with other electronic devices for information capturing, storing, processing, retrieving, and dissemination to users. Wilson, Mensah, and Boateng (2014) defined ICT as the combination of computer and telecommunication technology for information processing. Possession of ICT skills can be described as the ability to make appreciable use of information and communication technology facilities (Iqbal and Khan, 2017; Ugwanyi, 2009). Summarily, possession of ICT skills has to do with being able to use computer and other electronic devices proficiently in solving information problems.

Library personnel are expected to possess the following ICT skills to carry out required tasks in different units of the library. These include word processor, Internet navigation, computing management, computing application, and trouble-shooting skills. Librarians and library officers require ICT skills in carrying out the following functions which are ICT based: online searching of publishers' websites, sending and receiving electronic mails, online cataloguing and classifications of resources, online reference services, and others. Though review of literature has established that librarians in academic libraries in Nigeria, lacked the required ICT skills for operating in digital environment, (Obinyan and Unuabor, 2013). Nevertheless, possession of required ICT skills by both librarians and library officers would ensure effective tasks execution. Technology is a constantly evolving phenomenon which has the capacity to influence performance of duties and responsibilities, so library personnel should possess both creativity and adaptability skills for them to stay relevant in an information era (Hussain and Nazim, 2015).

Observation has revealed that library officers are lackadaisical about ICT. They view ICTs as the prerogative of the librarians alone. Most core functions such as cataloguing, classification, readers' services, and serial controlling are being automated in most university libraries and library officers as line officers must see the need to possess required ICT skill or be left behind. For them to keep being relevant, they must embrace ICT in performing various assigned task. Library officers should possess the right ICT skills to impact positively on service

delivery. This was attested to by Simmon and Corall (2011) who emphasised the need to possess the required ICT skills to operate in an electronic environment.

ICT has become very vital to provision of information in university libraries. This implies that personnel that do not have the required ICT skills would not only be ineffective in their task performance but would be irrelevant in the information arena. Lack of ICT skills by library practitioners would render them incompetent. Word processing, Internet navigation skill, digitisation skills, and others are some ICT skills required by librarians and library officers for information processing. Possession of these ICT skills will result in individual effectiveness and internal efficiency. Since ICT has become a common feature of the university library, it becomes mandatory for library personnel to key into this paradigm shift. Library personnel skills can be upgraded through constant practice, and this requires that necessary provision must be made to provide unfettered access to ICT facilities within the library for easy execution of tasks.

ICT access to facilities can be described as possessing within one's immediate reach information and communication facilities to execute different tasks involved in information gathering, preservation, organisation and dissemination within the university libraries. Access to ICT presupposes that one can actually handle and use ICT facilities to execute tasks. Access is an important factor of usage in that facilities must be available before an employee can be able to use them. Access to ICT is not synonymous to availability because ICT can be available but access can be denied either through lack of appropriate policy or inadequate facilities. Availability and the accessibility of ICT facilities in all units in the library have serious implications on task performance of its personnel. Access to necessary ICT facilities would enable library personnel to carry out their daily responsibilities timely with ease. Computer and its accessories, being one of the important ICT tools needed to execute task in the library, require Internet connectivity for easy execution of tasks and duties. This would promote effectiveness of the library personnel in task performance, while lack of adequate ICT facilities most especially the Internet may hamper the task performance of library personnel.

Though access to computer varies from personal ownership, friends, neighbours, workplace, public place to cybercafe, the provision of computer and its accessories in the workplace would, to a large extent, impact positively on individual personnel's task performance. The most germane to task performance of library personnel is the institutional provision of access to ICT facilities. This type of access is that which is provided by library management to enable smooth execution of task. This, will and to certain extent improve task performance and

productivity of library personnel. Adequacy of bandwidth for Internet connectivity is therefore a crucial factor to the conducive working environment within the university libraries.

The inability of library management to provide adequate access to ICT facilities may jeopardise task performance of library personnel, since access to ICT is necessary for its actual usage. This was attested to by West (2015) when he stated that inadequate capacity and non-affordability of facilities at the individual or the institutional levels constitute hindrances to ICT access and use. Easy access to ICT has the capacity to improve service delivery in libraries. Library personnel require internet-enabled computers, either laptop or desktop, on their tables for the execution of tasks such as classification, serials control, and readers' services. Other ICT facilities such as telephone, printers, scanners, photocopiers, multimedia projector, digital televisions, and digital camera are needed to facilitate task performance in the library. Access precipitates use, since use is not possible without access. Provision of adequate access to ICT will enable library personnel to use ICT at work. This will improve the pace at which tasks are completed, ensure accuracy of work done and as well motivate personnel to achieve better task performances.

The modality of work in most university libraries has changed due to the uptake of ICT by university library personnel. It has led to the emergence of what has been termed 'the hybrid library'. This is a library that combines both traditional and electronic methods to carry out its operations. Hybrid library is very much prevalent in most university libraries in developing countries. It has changed work procedure and made ICT use in library mandatory. Currently, in university libraries in Nigeria, library personnel use ICT in acquisition, cataloguing and classification, resources organisation, preservation, bibliographic control, serial control, retrievals, circulations and dissemination. ICT is used by line officers to improve individual effectiveness within the library and enhance relationship with teaching faculties and students.

ICT has impacted positively on service delivery, therefore, its use in carrying out various tasks by library personnel has enabled quicker and easier access to information, improve speed of work, accuracy of results, and development of innovative library services, (Haliso, 2011). The traditional method of carrying out functions and duties in the university library can no longer sustain the present dispensation in information provision and management in the face of proliferation of information. Therefore, ICT needs to be applied in all areas within the university libraries. It has been found to have great influence on job performances both in library and in other sectors of the economy (Priver, 2013). Currently, most university libraries are providing e-resources through online databases for their users, but poor capacity building on the part of the

library has been a major hindrance to appreciable use of these resources (Nwosu, Okeke and Ejedafiru, 2013). Library personnel must be versatile in using ICT to be able to provide the necessary guidance needed by other users.

ICT facilities are required for digitisation, retrospective conversion of manual catalogue, and provision of access to Internet resources in university libraries. The uptake of ICT by personnel and users would enable them to exploit e-resources in different databases, grey literature, theses and dissertations, and rare materials with ease, thus saving time and effort. ICT enables the library to create website for the improvement and usage of information resources within and outside of the library. This has allowed the provision of twenty-four-hour service to library patrons. This means users do not necessarily have to visit the library before they can access and use materials in the library or information centers. This was attested to by Omekwu and Echezona (2008) in Eze and Uzoigwe (2013), when they stated that 'Library services in this age are in the cyber space and are not affected by opening and closing hour' (P.433). The use of ICT in performing functions in the library is to ensure maximum and timely access to the resources and the services needed by library clientele and to enhance library personnel's performance.

Library software, which is one rudiment for using computer, has been found to pose a challenge to the use of ICT in executing tasks in university libraries. This, perhaps, may be due to some underlying factors such as inadequate funding, lack of skills by librarians, and lack of software maintenance, which has resulted in constant breakdown. Some public university libraries do not acquire all the modules needed by various units, thereby jeopardising the use of ICT for executing tasks by personnel, though this is peculiar to Nigeria.

The use of ICT facilities in public university library requires stable power supply which has nonetheless, been unattainable. The cost of keeping power steady in university libraries in Nigeria is indeed astronomical, and stood as an impediment to the utilisation of ICT in carrying out tasks. Due to the prevailing challenges, library personnel may not be using ICT facilities to perform library tasks. As a result of this, the tempo of work may slow down, and this may result in gross inefficiency. Proficient use of ICT has the capacity to impact positively on task performance among library personnel by enhancing their capacity and output. This was buttressed by Oguche (2017), when he reiterated that ICT usage improves capacity and capability. The ability to use ICT in performing various tasks without necessarily relying on a third party for intervention and manipulation of hardware is essential for effectiveness and efficiency in task execution.

It seems university libraries in the southwestern Nigeria are not having adequate access to ICT that will enable library personnel execute tasks efficiently and effectively. Lack of ICT access to necessary ICT infrastructure could prevent the development of capacity building among library professionals, and this may result in low skill levels. Likewise, non-possession of appropriate ICT skills by library personnel constitutes impediment to ICT use in task performance, while the non-use of ICT in task performance may impact negatively on tasks accomplishment. The inability of library personnel to leverage their demographics positively could equally affect library personnel task performance. Effective task performance requires individual to be positively disposed to their jobs.

## **1.2 Statement of the problem**

Extant literature has revealed that personnel in the academic libraries in Nigeria have been criticised for inefficiency and ineffective job performances, which appear to be below expectation. The outcome of low job performance is poor service delivery. Factors responsible for low job performance can be both human and facility-based. It has been observed that the characteristics of individual do play major role in the determination of disposition to task execution within the library. These demographic characteristics can promote or hinder task performance of public university library personnel. Personnel disposition resulting from their demography, may be responsible for this low job output.

It has been equally established from review of literature that library personnel do not have the ICT skills required for effective task performance in university libraries in Nigeria. Most library personnel seem to have challenges manipulating most of the ICT facilities available without third-party intervention, which results in time wasting and incidentally affects the quality and the quantity of their job output. In order for library personnel to perform maximally on the job, they need to possess certain level of ICT skills. This would enable them carry out effective and efficient task performance. Library personnel that do not possess the required skills are likely to face some challenges and perform tasks below expectation. Both librarians and library officers as the frontline personnel should possess adequate ICT skills that can impact positively on their tasks performance.

In spite of the huge resources being expended on the provision of ICT tools by the government and other stakeholders, many librarians and library officers cannot easily access ICT tools in the workplace because library personnel need for computers and its peripherals seems to be of little consideration to library managers when compared to provision of ICT for accreditation

purposes, which placed more emphasis on users rather than personnel. Even when provision is enabled by management, many factors could limit personnel accessibility to ICT facilities. Lack of access to ICT would prevent its use in library while non-use of ICT facilities in delivering library functions would lower efficiency, effectiveness of just-in-time and just-in-need services. However, both human resources and the state of ICT skills, access and use are very important to task performance in the library. Therefore, this study will examine the demographics, ICT skills, access and use as factors influencing task performance of library personnel in public university libraries in southwestern Nigeria.

### **1.3 Objectives of the study**

The main objective of this study is to investigate demographics, ICT skills, access and use as factors influencing task performance of library personnel in public universities in southwestern Nigeria. The specific objectives are to:

- i. examine the level of ICT skills possessed by library personnel in the public universities in southwestern Nigeria;
- ii. determine the level and ease of access to ICT facilities available to library personnel in public universities in southwestern Nigeria;
- iii. ascertain the frequency and level of use of ICT facilities by library personnel in public universities in southwestern Nigeria;
- iv. determine the level of task performance of library personnel in the public universities in southwestern Nigeria;
- v. examine the relationship between demographics and task performance of library personnel in public universities in southwestern Nigeria;
- vi. ascertain the relationship between the ICT skills possessed and the task performance of library personnel in public universities in southwestern Nigeria;
- vii. determine the relationship between access to ICT and task performance of library personnel in public universities in southwestern Nigeria;
- viii. examine the relationship between use of ICT and task performance of library personnel in public universities in southwestern Nigeria;
- ix. examine the relationship among demographics and ICT skills of library personnel in public universities in southwestern Nigeria;
- x. determine the relationship among demographics and ICT use by library personnel in public universities in southwestern Nigeria and;

- xi. determine the joint effect of demographics, ICT skills, access to, and ICT use on task performance of library personnel in public universities in southwestern Nigeria;
- xii. ascertain the relative effects of demographics, ICT skills, access to and use on task performance of library personnel in public universities in southwestern Nigeria.

#### **1.4.1 Research questions**

The following research questions were answered in the course of the study:

1. What is the level of ICT skills possessed by library personnel in public universities in southwestern Nigeria?
2. What is the level of access to ICT facilities provision for library personnel in public universities in southwestern Nigeria?
3. What is the frequency of ICT use by library personnel in public universities in southwestern Nigeria?
- 4a. What is the level of task performance of librarians in public universities in southwestern Nigeria based on self evaluation?
- 4b. What is the level of librarians task performance in public universities in southwestern Nigeria based on supervisors' evaluation?
- 4c. What is the summation of self and supervisor's evaluation of librarians' task performance in public universities in southwestern Nigeria?
- 5.a What is the level of task performance of library officers in public universities in southwestern Nigeria based on self evaluation?
- 5.b What is the level of task performance of library officers in public universities in southwestern Nigeria based on supervisors' evaluation.
- 5.c What is the summation of self and supervisor evaluation of task performance of library officers in public universities in southwestern Nigeria?
6. What is the summation of self and supervisors' evaluation of task performance of library personnel in public universities in southwestern Nigeria?
7. What is the relationship between demographics, ICT skills and ICT use by library personnel in public universities in southwestern Nigeria?
8. What is the relative effect of demographics, ICT skills, access and use on task performance of library personnel in public universities in southwestern Nigeria?

## **1.5 Hypotheses**

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

1. There is no significant relationship among demographics and task performance of library personnel in public universities in southwestern Nigeria.
2. There is no significant relationship between access to ICT and task performance of library personnel in public universities in southwestern Nigeria.
3. There is no significant relationship between ICT skills and task performance of library personnel in public universities in southwestern Nigeria.
4. There is no significant relationship between ICT use and task performance of library personnel in public university libraries in southwestern Nigeria.
5. Demographics, ICT skills, access and use do not have significant joint contribution on task performance of library personnel in public universities in southwestern Nigeria.

## **1.6 Scope of the study**

This study titled ‘Demographics, information and communication technology skills, access, and use as factors influencing task performance by library personnel’ was carried out in public university libraries in southwestern Nigeria. There are fourteen public universities in southwestern Nigeria which are owned by the federal and the state governments of Nigeria. Library personnel were librarians and the library offices working as professionals and para professionals. This is because they possess the professional knowledge required for handling the core functions in the library.

The variables studied are demographics (age, gender, marital status, educational qualification, work experience, job status and income), ICT skills, ICT access, ICT use and task performance. The indicators of task performance are job knowledge, job skills, task quality, task quantity, planning and organising, supervision, communication, creativity, timeliness, and adaptability. The ICT skills investigated are computing, navigation, computing management, and computing application skills. The state of ICT access provided for library personnel would be determined through these indicators: very easily accessible, easily accessible, occasionally accessible, and not accessible. ICT facilities that were focused on were computers, Internet, CD-ROM, OPAC, photocopier, scanner, barcode scanner, barcode reader, fax machine, CCTV, television, videoconferencing, multimedia projector, digital camera, printer,

telephone/smartphone, interactive white board, radio, multimedia projectors, and projecting screen.

### **1.7 Significance of the study**

The outcome of this study will create awareness through various sensitisation programmes on the need for university library personnel to set appropriate goals that will drive their task performance behaviour at the beginning of each year so that they can contribute maximally to the achievement of library objectives in their respective units. The study would also sensitised library personnel on the need to leverage their personal characteristics positively to achieve the goals and objectives of the university libraries. The outcome of this study would prompt library personnel on the need to enhance their ICT skills so as to be able to use ICT facilities in performing assigned tasks without third person interference.

This will aid the university management in enacting appropriate policy in respect of employee selection, development and management as this will ensure that the best applicant are recruited and giving the opportunity to grow on the job. The outcome of this study could enable university librarians take decisive steps in ensuring that library staff contributes maximally to the achievement of overall library performance. It would also help library management to take appropriate measure in ensuring that library personnel are ICT compliant as this would impact positively on the workflow in the university library. The findings can prompt the university management in taking decisions that would ensure accessibility to ICT facilities thus facilitating its use in carrying out various tasks assigned in the public university libraries.

The result of the study would sensitised the university management in ensuring that library personnel are provided with opportunities to enable them update their knowledge and skills through workshops, seminars and conferences attendance. It would prompt library management to provide access to ICT facilities to facilitate positive performance among library personnel. The study can sensitised university management, Library Registration Council of Nigerian (LRCN) and the National University Commission (NUC) on the need to review the policy which attached sponsorship by Tertiary Education Trust Fund (TETFUND) at seminars and workshops to presentation of papers only. This is because librarianship is services oriented and library personnel need to improve their technological skills from time to time so as to be current and relevant in the field. This study would be contributing to literature in the area of ICT in libraries, skills development, and library system administration.

## 1.8 Operational Definition of Terms

The following terms are defined as used in this study:

- i. **ICTaccess:** This is the degree to which ICT facilities are available for use by library personnel in public university libraries in Southwestern Nigeria.
- ii. **Demographics:** These are personal characteristics (age, gender, marital status, educational status, work experience, job status and income) of individual personnel.
- iii. **ICT skills:** They refer to possession of the capacities to utilise ICT facilities in carrying out various tasks by library personnel in public universities in Southwestern Nigeria.
- iv. **ICT use:** This refers to utilization of ICT for the performance of library functions by in the library personnel in public university libraries in Southwestern Nigeria.
- v. **Information and Communication Technology:** This comprises technological devices such as computer (equipment and software), telecommunication, with other electronic devices for information capturing, storing, processing, retrievals, and dissemination to library users in Southwestern Nigeria.
- vi. **Library personnel:** This refers to librarians with Masters in Library Studies/Science (MLS) and Masters in Information Science (M.Inf.Sc) degree and above, assistant librarians with Bachelor in Library Studies/Science (BLS/BLIS), and library officers with Diploma in Library Studies who are grouped together as librarians and library officers.
- vii. **Task performance:** This refers to actions and behaviour which library personnel exhibit in the process of carrying out assigned duties and responsibilities in university libraries, which results in low, moderate, or high performance.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

In this chapter, the relevant literature was reviewed under the following sub-headings:

- 2.2 Task performances of library personnel in universities.
- 2.3 ICT skills of library personnel in universities
  
- 2.4 Access to ICT facilities by library personnel in universities
- 2.5 ICT Use by library personnel in universities
- 2.6 Demographics and ICT skills of library personnel in universities
- 2.7 Demographics and ICT use by library personnel in universities
- 2.8 Demographics and task performance of library personnel in universities
- 2.9 ICT skills and task performance of library personnel in universities
- 2.10 Access to ICT and task performance of library personnel in universities
- 2.11 ICT use and task performance of library personnel in universities
- 2.12 Theoretical framework
- 2.13 Conceptual model
- 2.14 Appraisal of the literature reviewed

#### **2.2 Task performance by library personnel in universities**

Studies on performance that have been reported in literature are diverse and multifaceted in nature. They range from studies on organisational performance to individual employee's performance. At the level of organisational performance, many studies have looked at library performance for the purpose of improving service delivery and meeting institutional goals. Such studies include Whitmire (2002) and Ismail, Musa, Ladisma, Sharunizan and Shari, (2011). The other facet which is equally germane to organisational success is employees' performance. Effective performance of tasks by library employees determines organisation's success. Stetar (2000) and Hatzel (2006) define task as the discrete unit of action that has a beginning, an end, as well as behaviour which can be observed and measured. Nwosu, Ugwwoegbu and Okeke (2013) described tasks as specific work or duty expected to be carried out as directed by authority. Every job has delineated tasks to be done. This may differ from job to job. Ability of the library management to delineate tasks and responsibilities will ensure optimum performance by its personnel.

Cascio (2006) defined performance in terms of goals, measurement and assessment. This means that performance involves setting up achievable goals, measurement of accomplishment, and regular assessment of progress. Campbell (1990) defined performance as actions and behaviour of individuals which can be controlled and which contribute to organisation wellbeing. He conceptualised performance as behaviour rather than outcome. He sees job performance as action rather than result of an action. Outcome of behaviour has to do with job productivity while behaviour deals with effectiveness. He is of the view that, in determination of effectiveness, results should be evaluated and not the actions of the employee. Robinson and Coutler (2009) described performance as the end result of an activity. In this definition, performance was associated with result.

Stefan (2011) described performance as outcomes of activities of either individual or an organisation for a specific period of time. Performance involves taking series of actions to produce results, and this is done through proper integration of knowledge and skills (Elger, 2013). Sonnentag and Freese (2001) described performance as observable behaviour as well as an outcome of behaviour. When performance is viewed from the perspective of action, it is described as behavioural. Actions that constitute performance are supposed to be within the control of the individual. The behavioural aspect of performance has to do with what an individual does in a work situation which amounts to effectiveness, while the outcome is what individual's can achieve in terms of productivity.

Sonnentag, Volmer and Spychalla (2010) also emphasised the relevance of individual performance to organisation success. They described performance as a goal-directed behaviour for which an organisation hires employees. The extent to which individual personnel responds to tasks, duties and responsibilities must be determined both for the advantage of the individual and that of the organisation. Salleh, Yakub and Dzulkifli (2011) associated good performance with quality, quantity, cooperation, dependability and creativity. Curral (2013) described individual performance as the unique contribution of an employee to the achievement of organisation goals. Campbell (1990) used eight analytical model to explain the taxonomy of job performance as comprising 'task specific and non task specific proficiency, discipline, effort and communication'. In Campbell's model, task performance is regarded as task specific proficiency. Job performance, being a generic term, encapsulates task, contextual and counterproductive behaviour. Task performance is an element of job performance which deals with outcome of individual input that enables the achievement of organisation's objectives.

Borman and Motowidlo (1993) referred to task performance as the expertise with which job employees execute officially assigned responsibilities considered as element of the job: that is, actions which promote the organisation's technical mainstay either directly or indirectly through the implementation of a part, or its technological procedure or by providing needed equipment or services. Murphy (1989) described task performance as being able to complete assigned job duties. Rotundo (2002) argued that it is not right to limit task performance to behaviours that are associated as part of a job description. According to her, limiting the definition this way could be problematic. This is because job description can differ from job to job and from one organisation to the other, and this makes comparison of performance across organisations difficult. What constitutes task performance in librarianship is quite different from task performance in lecturing job. On this basis, she defined task performance as activities and behaviours that lead directly or indirectly to the manufacture of goods or the provision of services (Rotundo 2002). She submitted that what constitutes job performance can be categorised into three different templates: task, contextual, and counter-productive behaviour.

Griffins, Neal and Neale (2000) described task performance as an element of job performance that can bring about effectiveness outcomes for any organisation, while contextual performance has to do with helping behaviour which is discretionary in nature. It complements task performance since it is the behaviour that supports the circumstances in which the technical cores operate. According to them, task performance is described as fundamental technical activities involved in a job. These job duties are important for achieving organisation success.

Research on performance was furthered by Viswesvaran and Ones (2000) in order to reach consensus on performance model. They described task performance as 'scalable actions' which employees engage in and which are geared towards organisation goals. According to them, task performance focuses on performing role prescribed activity. Other studies that provided a building block for the current study include Pukalos, Sharon, Donovans and Plasmodon (2000) who advanced the behavioural dimension of job performance further to include adaptive performance. Adaptive performance has to do with how an individual employee self-manages new learning experiences due to technology uptake.

Muchinsky (2003) described task performance as a kind of organized set of workers' actions which can be evaluated in terms of achievement individually. Bystrom and Lloyd (2012) regarded task performance in work environment as that which has to do with the nature of one's duties, resources available, as well as the socio-cultural structure of the

organisation. This means that availability of resources and organisation climate are essential in carrying out assigned duties. Norman (2009) conceptualised job performance as having three dimensions, consisting of task behaviour, citizenship behaviour and counterproductive behaviour. These three dimensions were further divided into eight dimensions. Task performance was categorised into two divisions: adaptive and routine. Miao (2011) defined task performance as work behaviour which has to do with either operating a technical process, or by providing and maintaining services that meet organisation's technical needs.

Koopman, Bernaards, Hilderbrandt, Schanfeli, De Vet and Beck (2011) defined task performance "as the effectiveness with which one performs a central job tasks. In their analysis of literature, they attempted to find a framework for describing individual's work performance. They mentioned various terms that researchers have used to refer to task performance. Task performance was referred to differently by different researchers as job specific task proficiency and task accomplishment, work capability, work quality, job knowledge and in-role behaviour. They identified four dimensions by which work performance can be categorised. These are 'task performance, extral role behaviour, counterproductive work behaviour, and adaptive performance'. He explained further that the dimension used to describe job performance can be generalised across jobs, while the indicators of task performance vary from job to job because of peculiarity of jobs. Nasir, Mohamadi, Shahrazad, Fatima, Kairudin, Halim, (2011) used the followings as indicators of task performance: 'job knowledge, job skills, task quality and quantity, planning and organising, and communication'.

Ability to carry out effective task performance by library personnel requires job knowledge which can also be referred to as technical knowledge. Possession of job knowledge enables personnel to perform assigned tasks effectively. Library personnel must possess declarative knowledge which has to do with facts and principles which constitute the body of knowledge in librarianship. They are also expected to possess knowledge of procedure which has to do with acquisition of different skills required for carry out job responsibilities. Most of the important skills which library professionals must possess are ICT- based. Haddow (2012) identified searching skills as one of the important skills required by library practitioners, while communication and customer skills were equally necessary. The quality and quantity of tasks accomplished can determine whether a person performance is high or low. The capacity to produce qualitative and quantifiable tasks will result in high level of performance from individuals.

Communication can be described as the transfer of information from sender and to receiver. The ability to communicate effectively is an essential skill constantly on demand in any job. Communication is a major requirement in job selection and it is very crucial within any organisation set up. Asamu (2014) described it as an important cord within an organisation that binds individuals and units together. Different stakeholders in the library have to communicate in order to achieve library purpose. Effective communication is needed by library personnel for passing information, assigning job responsibilities, delegating authority, providing feedback, correcting and advising subordinates. Effective task performance requires constant exchange of information within an organisation, between management and supervisors, and between supervisors and their subordinates. The ability to communicate well is vital to understanding job expectations. Effective communication involves ability to listen carefully, sieve out important ideas from the masses of inconsequential details, process the information and provide a feedback that is well articulated.

The use of appropriate communication strategy will bring about positive task performance among library personnel. National Association of Colleges and Employers (2010) identified various methods of communication such as verbal, non-verbal, visual, written or aural which can be useful in the library. Communication is vital in enhancing relationship within organisation. Effective communication within the library would help to prevent rift, rancour, misunderstanding, ill feelings and disaffection among workers. In a related study conducted by Asamu (2014) on impact of communication on workers performance in selected organisations in Lagos State using 120 respondents. He viewed communication as an important part of any organisation and emphasised its importance as bases for achieving better performance. The outcome of this study indicated that there was relationship between effective communication, workers' performance, productivity and commitment. This findings, however could not be generalised as a result of the small population. Nwankwo and Okonkwo (2015) conducted similar study on 170 non academic and 139 academic staff a Nnamdi Azikwe University Awka using Taro Yamane and stratified random sampling method to determine the sampling size of 166; while chi square was used to analyse data. The findings indicated that effective communication had significant relationship with employees' performance.

Planning and organising resources and manpower within the library have the capacity to bring about effective task performance among library personnel. Management of both human and material resources is fundamental to achieving organisation's success. Adequate supervision is essential in ensuring that personnel perform the duties and responsibilities assigned to them.

According to Ahmad and Yaseen (2009), planning, directing, controlling and organising are essential management functions which are needed by library managers to gear personnel towards the achievement of laudable goals of the library. According to Conway (n d), employees' performance is an important factor in organisation which must be of concern to managers due to its importance in raising the level of organisation's productivity. Possession of supervisory attributes by library personnel is equally necessary if the library were to achieve efficiency and effectiveness in the performance of their jobs. In a study by Azman, Chin Sieng, Ajis, Dollah and Boerhannoedd (2009), it was discovered that supervisor's support positively and significantly correlate with job performance of subordinates. This is an indication that possession of good supervisory skills can influence the task performance of subordinate staff positively.

Creativity, according to Tella and Ayeni (2006), has to do with the bringing forth of new ideas that are novel and unusual. Nair and Gopal in Gicholi(2010) described creativity as the ability to initiate new ideas by individual or a group that can ensure competitive advantage for an organisation. The ultimate goal of creativity is to solve problem. Library requires creative ability among its personnel, most especially in the ICT-driven era which has brought about constant need for adaptability skills. Onuoha, Anyanwu, Ossai-onah, and Amechi(2015)see creativity as a major part of librarianship. The ability to adapt to changes due to new innovations in technology by library personnel has become a much sought-after skills in ICT-driven library environment. Library professionals require adaptability skills to strive in this digital era. Leong (2014) opined that library as an organisation must deal with lack of adaptability skills among its personnel because of its importance in ICT era.

Researchers have presented different perspectives of task performance. While Murphy (1989), Campbell (1990) and Muchinsky (2003) present task performance as a function of behaviour, Rotundo (2002) emphasis was on behavioural traits that result in certain outcomes. Griffins, Neal and Neale (2000) and Miao emphasised knowledge and technical skills. Bystrom and Lloyd (2012) viewed task performance as that which has to do with activities within the job. Within the library setting, task performance refers to actions and behaviour of personnel which enable the library to achieve its goals. Griffin, Neal and Neale (2000) carried out a study on the contribution of task performance and contextual performance to effectiveness using air control officials as respondents, it was discovered that both are distinctive dimension of work behaviour which has the capacity to influence individual performance.

In this study, the fundamentals of task performance examined were situational awareness, control actions, communication tasks, and operation of facilities. Findings from the study showed

that both task and contextual performance can be differentiated in an air control environment, and both were found to have contributed to perceived effectiveness of the controllers. In this study, it was discovered that core task performance of air control officers was tightly regulated. Ismail and Abidin(2010) studied workers' competence and its impact on their performance in Malaysian private service sector, and findings showed workers' competence significantly influenced workers' performance.

Another related study conducted by Nasir, Mohammadi, Wan Shahrazad, Fatimah, Khairudin and Halim (2011) investigated 450 employees in organisations in Iran. The study investigated the influence of gender, age and tenure on the relationship between job satisfaction and task performance. Findings revealed that gender and education moderated the relationship between job satisfaction and task performance. It further revealed significant relationship between job satisfaction and task performance, while age and tenure did not have any relationship with performance. Maripaz, Ombra and Osman (2013) studied 220 respondents in 22 government institutions in Malaysia using indices such as 'job knowledge and skills, quality of work done, cooperation and judgement'. Findings revealed that acquisition of right skills and competence had significant positive relationship with task performance while employer rated task performance of employees as satisfactory.

Library personnel performances are assessed to determine employees' efficiency and effectiveness in the achievement of university objectives. The outcome of effective performance should be improvement in quality, capacity and capability, reduction in the cost of management, adequacy of job knowledge and skills. These are achievable when personnel are equally well motivated in terms of providing them with an enabling environment to perform. Availability of technological infrastructure could motivate an individual to perform. Stajkovic and Luthan (2003) were also of the opinion that employees are the drivers of success in any organisation, and they need to be motivated.

Perera, Khatibi, Nairarkima and Chinna (2014) emphasised that highly performing employees are assets to organisations because of their roles in the achievement of strategic aims. Library personnel perform different duties and responsibilities in the library. They are saddled with the responsibility of constantly developing library collections such as books which consist of primary, secondary and tertiary sources of information. Other collections are serials, monographs, conference proceedings, ephemerals, e-resources, and so on. Some of the functions performed by library personnel include ordering, receipt in payment and documentation.

After proper documentation in the acquisition unit, the materials are moved to the technical unit where they are processed. Adeleke and Olorunisola (2010) identified line functions in this unit to include cataloguing and classification. Though library tasks here could be manual based but the advent of ICT has injected new modality for executing tasks in this unit through the use of online tools. Tasks carried out within this unit enable proper organisation of resources by library personnel in order to make retrieval of documents easy. Bello and Mansor (2012) studied functions of cataloguers, and 'findings revealed that 80% of the cataloguers worked in the technical section of the library. Their function include performing original descriptive and subject cataloguing using the right guidelines and rules, as well as assigning subject headings to materials using the thesaurus online. Edoaka and Anunobi (2008), Anunobi, Nwakwuo and Ejiofor (2010) and Olayemi, Umar, Yemi Peters, Sokari and Haliru (2015) identified task performed by the serials section of the library, and these are acquisition, ordering, claiming, check in receipt routing, binding, payment, subscription renewal, serials display, financial control, classification and management report, serials documentation, and others. All the functions in the serials units can be done manually and by the use of ICT. The tasks of finding and retrieving the materials can also equally be done manually through manual-based catalogue and Online Public Access Catalogue (OPAC).

Adebowale, Okiki, and Yakubu (2013) identified activities in the circulation section. These include registration, charging and discharging, book reservation, answering reference queries, inter-library loan, user education, and others. Circulation unit plays important role in making the activities of the library visible to users. It is the intermediary between the users and the library. The job responsibilities there require competent officers to be at the forefront. Most of the tasks carried out at this unit involve clerical staff, while librarians and library officers deal with user queries, inter-library loan, user education, supervision and management. According to Khoo (2005), the working environment of library professionals has become more complex due to new technologies and new information sources. This has brought about new tasks and roles such as copy cataloguing and classification, providing user education through the web, using OPAC for retrievals, synchronous and asynchronous communication with users, and selective dissemination of information and so on.

Nwosu, Ugwoegbu, Okeke (2013) investigated 219 library professionals from the South-east, and findings revealed that majority of library professionals performed moderately on their task and no relationship existed between their performance and their level of motivation. Oyewole and Popoola (2015) studied the effects of psycho social factors on job performance of

library personnel in colleges of education, and the finding indicated a high level of job performance among library personnel in this sector. Igbinovia (2017) conducted a study on emotional intelligence and self awareness as correlates of task performance among library personnel. He attempted to determine task performance level of library personnel in Edo State. Findings from this study showed that there was high level of task performance amongst library personnel in academic libraries in Edo State while emotional intelligence and self awareness jointly and significantly correlated with task performance. He suggested capacity building and promotion of self development among library personnel. Most importantly, that, library officers should demonstrate effective and efficient performance.

Many factors influence tasks performance of library personnel. Such factors, according to Elger (2013) in his theory of performance, include performer mindset, immersion and engagement in reflective practice. He described performance mindset as the ability to set challenging goals while immersion is described as the physical, social and intellectual environment that can stimulate professional development. The personnel mindset and their responses to social and intellectual environment have consequences on personnel tasks performance. According to Yusuf, Baba and Suleiman (2015), employees' performance results from three major factors: the employees' personal ability or the capacity to perform certain tasks, extent of efforts expended on such tasks, and the level of organisations' support received to carry out such tasks. Other researchers correlated employees performance with management style, increase in wages and salaries, training opportunities, recognition, and job security. Several other factors such as personality, values, attitudes, perceptions, ability, and motivation equally determine individual task performance (Marchant, 1999).

However, many factors can hinder task performance among university library personnel. These are role ambiguity which is the poor conception of one's role, role conflict and lack of job specifications, inability to set goals and targets, breakdown of tools and machines, obsolete tools, stressors, lack of job autonomy, non-availability of appropriate infrastructure, poor organisation climate, poor leadership style, uncooperative attitude of teaching faculty, and inadequate power supply. Cascio (2006) identified hindrances to effective performance as obsolete and poorly maintained equipment, inadequate supplies, poorly design work spaces, and wrong work methods. The performance of public university library personnel can also be affected by other factors such as leadership style and environmental factors. According to Mishra (2006), organisation strategy, authority structure, selection, training procedures, reward system, and group cohesiveness promote either favourable or unfavourable climate for achievement. This is in

consonance with Abdulahi's (2007) view in which he reiterated that effective performance of an employee in any organisation depends on the administrative ability at channelling personnel effort in the right direction. Iroaganachi and Nikko (2016) regard personnel assessment as useful tools in determining the relevance, effectiveness, and efficiency of the workforce.

### **2.3 ICT skills of library personnel in universities**

ICT skills can be defined as the capacity to make appreciable use of technological tools in work procedure. Ugwuanyi (2009) described ICT skills as the ability to apply ICT in acquisition, organisation, retrieval, dissemination of information, including skills to function in a web-based environment. Association of College Libraries (2007) in Buarki, Hepworth and Murray (2011) refers to ICT skills as possessing the abilities and capabilities which enable an individual to use computer, with different applications to carry out library functions. Quadri (2012) defined ICT skills as abilities to use computer and other telecommunication tools to meet personal, educational and work needs. Possession of ICT skills have to do with the ability to use technology on the job. Katz and Macklin (2005) identified the components of ICT fluency to include ability to "define, access, manage, integrate, evaluate and create information" (P.51)

Kamila (2013) in a study on 'managerial change for the survival of library and information centres in the era of ICT' attested to the fact that traditional skills are gradually being replaced by new skills, new job description and new environment. The new skill requisition in the university library was supported by Quadri (2012) when he reiterated that "traditional roles are being increasingly subsumed by new skills" (P. 1) The changing roles of librarians from information gatekeepers to information facilitators, intermediary, and end user trainer require high level knowledge of ICT and expertise for effective performance of library tasks (Nath, Bahl, and Kumar, 2007). Enakrire (2019) advocated that library professionals require adequate ICT skills and knowledge to carry out the multifarious tasks expected of them in the university library. Library professionals should be knowledgeable both theoretically and practically regarding ICT because they are the guardian of information literacy in their various institutions. Librarians must be experts to teach navigation skills to others and to assist their users (Philip, 2004; Nath, Bahl and Kumar, 2007). Patel and Bhavsar (2012) reiterated that technology is constantly changing, and this precipitates that information professionals must be at alert to these changes so that they do not become obsolete. Library officers as professionals are not excluded from the possession of ICT skills because their duties and tasks have assumed an upskill level due to the emergence of ICT.

This is why Gireesh, Kumar and Muruli (2013) affirmed that library professionals need constant updating of their ICT skills so as to stay relevant in this ICT age. According to Priti (2013), library personnel should equip themselves with appropriate skills and competencies needed to carry out library tasks. The display of cognitive, psychomotor and affective skills by personnel in the library is necessary for effectiveness and efficiency in service delivery. The computer skills need of personnel includes basic operation system, use of computer for acquisition, cataloguing and classification, formulation of searches, compilation of computerised bibliographic searches and database search. Islam and Islam (2006) also emphasised the need for library professionals to possess expertise in the use of modern technological tools. Some of the skills librarians are expected to possess, according to Nonthacumjane (2011), include use of PowerPoint, Microsoft Word for data creation, creation of HTML/SGML, Extensible Markup Language, metadata indexing and database technology, webpage creation and management, web technology, communicating and manipulation of hardware, as well as navigating the Internet.

Usman Koy (2018) highlighted the important technology tools and skills required from library professionals to operate successfully in this era. These include operating system, content development software, programming language, database management system, plagiarism detection software and security software. Pateria (2018) also emphasised skills requisition from library personnel in a networked digital environment that will enable them to keep pace with technology advancement in the library, such as computer skill, networking skill, information retrieval skill, managerial skill, communication skill and preservation skill. Sankari and Chinnasamy (2014) studied ICT skills among librarians in Engineering Colleges in Salem and Namakkal districts and enumerated prevailing ICT skills among them. These include skills in operating a computer, use of different software packages and software programming.

From the list of ICT skills required to be possessed by librarians, computer literacy emerged as a fundamental skill needed for efficient task performance. Possession of computer skills is highly important because of its usefulness in facilitating computerisation, digitisation, database management, and e-resources management in the university library. Nwachukwu (2005) highlighted the importance of computer as facilitator of library computerisation which ensures that clients are satisfied with precision and speed of retrieval, as well as the versatility of their bibliographic searches. Singh and Pinki (2009) described library personnel as knowledge navigator and change facilitator that can meet identified needs. Performing fundamental tasks in the library would ensure smooth and easy flow of work. According to Priti (2013), library professionals of this century should be technologically fluent and be able to thrive in a digital

environment. He reiterated further that library professional must be able to innovate with new technology by being able to design, maintain web page and databases; be a manager, a designer, as well as a system analyst. Batool and Ameen (2010) opined that librarians as information professionals must be able to enhance storage capacity of computer and trouble shoot as well when there is problem. Candidly, ICT skills requisition of library personnel must be comprehensive. The inability to possess the required ICT skills by library personnel is inimical to efficiency in the library.

Some studies revealed the possession of high ICT literacy skills among library professionals. Such studies include Thanuskodi (2011) whose findings indicated that 95.12% of the respondents have basic knowledge of computer; 81.67% were able to explore the Internet; 42.68% had knowledge of computer; 81.67% have knowledge of multimedia; while 26% possesses knowledge of computer programming. Apart from the ICT skills enumerated above, library personnel should be able to network with other libraries to achieve their objectives and goals. In a study conducted by Nwogo (2011) on networked literacy skills of academic librarians, result indicated that librarians possessed high ICT literacy skill in using Internet while majority studied surfed the Internet on daily and weekly bases. Kapondera (2016) investigated the level ICT application in Mzuzu University Library, using 18 library staff as respondents. The aim of this study was to find the state of ICT use, relevance of ICT resources, skills and knowledge of staff, as well as factors that affect use. Findings revealed that all the sections in the university library were computerised while library professionals possessed good ICT skills.

Many literatures too have continued to bemoan the dearth of ICT skills among library personnel. Hajar and Asefeh (2008), in their study on computer literacy among librarians in Isfahan University, the findings showed low level of computer skills among respondents while long use of computer had not impacted on the skills of library personnel, even though computers were being used by some library personnel to perform their official tasks. Abass (2014) investigated ICT skills of academic librarian, using 41 respondents in eleven institutions in Nigeria. The findings revealed a big difference between the benefits derivable from ICT and its actual use. It found out that there was lack of skill among librarians which prevented them from using the ICT facilities that were available to explore information resources on the web. It equally revealed library personnel inability to make judicious use of specialised databases paid for by the university management such as ScienceDirect, Agora, Biological Abstract, and others. He, however, recommended the provision of ICT equipment and facilities, increased budgetary allocation to fund ICT project and a change of attitude among librarians towards ICT use.

Akande (2014) conducted a study on academic libraries in Oyo state and finding indicated that library personnel had basic ICT skills, could use Internet, computer and e-mail but lacked the skills required for using advanced web-based technology, packages for web design, trouble shooting, and project management. This was equally supported by Patel and Bhavsar (2012) who stated that lack of skills has not allowed library professionals to handle e-resource the way it ought to. Adequate emphasis on the possession of ICT skills will enable library personnel to function in ICT-based environment. Momoh and Saka (2016) studied ICT training, skills acquisition and use, using 51 respondents from 14 special libraries in Abuja. Findings indicated the various means by which individuals acquire their ICT skills. Respondents indicated the relevant skills acquired as operating computer, database management, Internet navigation, library software management, networking and other application packages. He recommended that library staff must be trained with modern ICT facilities to acquire the right skills.

Employers of labour in the present dispensation have continued to lay emphasis on possession of ICT skills to gain employment into LIS profession. This indicates that possession of ICT skills by library personnel has become mandatory. Buarki, Hepworth and Murray (2011) conducted an explorative study of ICT skills and employability needs of library and information students through literature review. The study revealed that possession of high level ICT skills were considered important prerequisite for LIS students' employment. This is an indication that possession of ICT skill has become essential requirement to gain employment in LIS profession. Several studies have identified lack of ICT skills among library personnel. This dearth of highly skilled manpower was equally affirmed by the committee of university librarians held at Port Harcourt in (2014), where they called on university librarians to train library staff for efficient and effective library service delivery and urged the university administrators to make library development fund available to university libraries for staff development. They advocated for training and retraining of library personnel to attain best practices.

Momoh and Saka (2016) investigated training, ICT skill and ICT use in special libraries in Abuja using 51 respondents from 14 libraries. They however suggested the need for modern facilities to train librarians to acquire needed skills. However, several factors were found to militate against the acquisition of necessary skills by library personnel. Sankari and Chinnasamy (2014) regarded lack of support from relevant authority as a hindrance affecting library personnel acquisition of needed ICT skills. He therefore suggested continuous updating for librarians and the provision of current ICT infrastructure for them to deliver on their mandate. Abass (2014) recommended the provision of ICT equipment and facilities, increased budgetary allocation to

fund project and a change of attitude among librarians towards ICT use. Also, Momoh and Saka (2016) were of the view that modern facilities should be used in training and retraining of library personnel.

#### **2.4 ICT access by library personnel in universities**

Access to ICT, according to Adeoye and Popoola (2011), is the degree to which a particular system is available to users for the purpose of achieving efficiency, effectiveness and satisfaction. Access to ICT, on the other hand, can be described as the degree to which ICT tools are available for the use of library personnel. Olatokun (2009) and Warschauer and Tina (2010) associated access to ICT with possessing physical access which was associated with availability of the Internet connected computer and other electronic devices. Edna, Gikandi and Solomon (2014) regarded access to ICT as an important criterion that could hinder its use in service delivery. Access to ICT is highly essential in the library environment because it enables access to both immediate and remote information resources. Enejia (2009) asserted that access to Internet enabled the performance of tasks, such as sending and receiving mails, receiving news from newsgroup, online cataloguing and classification, downloading information, and others.

ICT availability determines its accessibility. ICT play important role in the provision of resources which is the main preoccupation in the university library. Obinyan and Unuabhor (2013) stated that access to ICT will culminate into access to global information resources that will meet clients' need. Access to ICT enables practitioners to have worldwide accessibility to information resources. Ability of the university library to enable access to resources globally would result in users' satisfaction. ICT infrastructure and facilities must be readily accessible to library personnel in order to facilitate and impact positively on the performance of job tasks. Library personnel can become disillusioned and frustrated if needed resources are not deployed to facilitate the attainment of set goals. Unavailability of desired ICT tools for use in task execution becomes a stressor while its availability becomes an enhancer of performance. Provision of access to ICT in the workplace is equally dependent on the perception of management on the deployment of ICT to carry out job duties. Library personnel will use ICT to perform task if the library management provides an enabling environment, and this will boost their effectiveness on the job.

Level of access to ICT has been found to influence its use in practice. Access to technology offers many benefits to both personnel and users because access to ICT will culminate in access to information, education, commerce, e-government, etc. Though access to ICT is

plausible in the office, home, cyber cafe and so on but the most germane of this access is that which is provided by management in the libraries. In fact, Kadiri quoted by Olatoye (2009) agreed that lack of access to ICT at home and in the workplace could be hindrance to its usage. This was buttressed by Nebeolise (2013) and Hussain and Nazim (2015) who identified inadequate infrastructure as hindrance to ICT use in library practice. Rosenberg (2005) in her study titled 'Towards Digital Library in Africa' found that in most of the libraries, electronic resources were available but facilities were poor. Equally, Adetimirin (2012) identified lack of access as impediment to ICT use among undergraduates.

Alemneh (2006) stressed the universality of access by everyone, from everywhere via anything – laptop, I-pad, palm organizer, and so on. At present, many libraries cannot boast of having enough/adequate number of computers, cannot pay for adequate bandwidth, not to talk of subscribing to databases online. According to her, most university libraries in Africa did not have adequate infrastructure to utilise digital resources. She reiterated that an average African university bandwidth capacity was of the same capacity with broadband available for suburban use in the United States. No wonder, Chigbudi and Dim (2012) attributed success to installation of mast in several places within the university community to boost their Internet connectivity. Without access to ICT, much cannot be achieved in terms of using ICT to carry out tasks. This is why Clark and Clarion (2015) considered access as part of the solution to digital inclusion and empowerment.

Kyakulumbe, Olobo and Kisenyi (2013) argued that members of a social system would utilise ICT only when they are allowed to have access to such facility and are empowered through constant exchange of information to utilise it by the management. Twari and Sahoo (2013) also regarded access to ICT as very significant to the achievement of library goals, information management and effective services delivery. Edna and Gikandi (2014) considering access to electronic service equally concluded that access to electronic service was an important criterion that could hinder ICT use in service delivery. This is because access to ICT will enable libraries to have access to resources beyond the immediate library stock in form of electronic: resources, journals, textbooks, online-databases, CD-ROM databases, as well as online publisher's catalogue.

Batool and Amen (2010) insisted that before the library could meet the demand of the 21st century librarianship, university libraries must be well equipped with necessary technology and competent personnel. Internet is an ICT resources used in the library. Access to the Internet is crucial to task performance in the library because it enables the performance of certain tasks in

the library such as sending and receiving e-mail, receiving news from newsgroup, online cataloguing and classification, downloading, chatting, answering users query, reading of e-books and newspapers, and uploading articles for publication. According to Bhangu (2013), Internet is a term used for the interconnected multiple networks located all over the world through the use of TCP and IP protocol. Internet infrastructure supports digital library, virtual learning, research collaboration, and publishing. In fact, Chigbudi and Dim (2012) highlighted the importance of the Internet and described it as capable of increasing webometric ranking of universities.

Mobile phone, is a combination of voice and data, has indeed made the library mobile and has simplified library services because information can be accessed on the move, at any time and in any place, yet the inability of the library to provide needed fund for its use to carry out library functions has hindered its use in task performance. This could have, to some extent, reduced the problem of lack of access to the Internet, but the major issue is funding. This poor funding has pervaded the library atmosphere for quite a while, especially the developing countries of the world, and this has impacted negatively on library functions (Amkpa and Aba, 2009).

A higher accessibility rate has been recorded in the area of mobile phone usage among Nigerian population, but the same cannot be said of the Internet in the workplace. Lack of access to Internet is usually due to low bandwidth subscribed to by most university. This has been regarded as a global issue (Butt, Quitab and Mahmood, 2010). However, access to Internet through the wireless broadband has led to reduction in the digital divide between male and female and between the haves and the have not in the society. To buttress this, Amkpa and Abba (2009) stressed the fact that access is not universal.

ICT makes accessibility to-eresources plausible. According to Okiy (2010), ICT access will translate into access to timely, accurate, current and relevant information. In fact, Odongo (2011) buttressed this view by stating that access to ICT makes information plausible. Barrier to access can be classified as both environmental and human in nature. Human barrier ranges from negative attitude, lack of skills, to lack of knowledge for right use of ICT. Attitude, knowledge and skills of personnel are essential for effective use of technological devices. Environmental barriers such as lack of infrastructural facilities, lack of bandwidth which results from inadequate funding and lack of commitment by management equally affect access to ICT. From observation, most libraries and the personnel working in libraries lack access to technology (hard and software). Wanangeye and George (2016) studied the application of ICT for the provision ofservices by staff at Mount Kenya University and enumerated ICT tools provided for the staff to work with. This includes fax machines, printers, telephone in each office, telex-fax machine, and

others. The study also showed that 35(52%) of staff had access to computer, 6% shared computer, while senior staff had access to personal computers.

Generally, few studies done in the past had established the issue of lack of ICT access by library personnel. Olatokun (2011) also emphasised that there were gaps in access to ICT and use of ICT among the various gender working in the library. Okorie (2011) attributed constraints to access in Africa to inadequate infrastructure, weak policy and the inefficiency of the telecom language. Philip (2004) identified barriers to technology access as connectivity, obsolete equipment, software issues, funding, incompetence, knowledge and awareness. Benefits derived from access to ICT are many. According to Igwebu and Agbo (2017) ICT increased accessibility to information throughout the world, reduces stress associated with manual operations and increases the efficiency of personnel in acquiring, cataloguing, classifying, information retrievals and information dissemination.

## **2.5 ICT use by library personnel in universities**

ICT has become sine qua non with the university library. ICT use is very much prevalent in today's university libraries because of its effectiveness in carrying out library functions. ICT use in library deals with deployment and usage of information and communication technology by workers. Ugwuanyi (2001), Nwosu, Ugwuegbu and Okeke (2013) Batcha (2013) and Konapa (2014) affirmed that ICT had revolutionised library services by changing the scenario of the library environment totally. Idhalana and Ifidon (2019) described ICT as all technology put in place deliberately to acquire, analysed, store and disseminate information. Library personnel's use of ICT for task performance in university libraries should cut across all sections such as the collection development, cataloguing and classification, reference, readers, and serial and media sections.

Maceli and Burke (2016) in a study identified the types of technology frequently used in libraries as e-mail, word processing, Internet, online public catalogue, searching tools, and printers. Akinboro and Omoniyi (2002), quoting Magara (2002), identified the following services to which ICT had been deployed to perform. These are resources sharing, digitised circulation services, current awareness services, information services, OPAC, subscription, ordering, acquisition and borrowing. (Magara, 2002: p. 47).

Others, according to Islam and Islam (2006), are creation of ascension list, report writing, answering reference queries, and synchronous and asynchronous communication with the users. Nkanu (2008) equally itemised what ICT is used for in the library. These include the

development of online resources, accessing online resources, development of offline resources processing of library materials, and provision of services. Adebowale, Okiki and Yakubu (2013) itemised what ICT is used for in various units of the library. At the technical section, ICT is used to generate catalogue cards, carry out retrospective conversion of library databases, online classification; while at the circulation section, ICT is used to provide inter-library loan service, book lending and reservations, generate overdue notices, database construction, online searching, downloading, uploading of materials, indexing and abstracting, current awareness, notification of new ascensions, and others.

Hussain and Nazim (2015) studied the use of different information and communication technologies in Indian facilities universities, and their finding revealed that majority of library in India used ICT in housekeeping such as cataloguing, classification, serial control, acquisition and budgeting, and to provide ICT-based services such as OPAC and web-based reference services, but majority were not using ICT for online tutorials, subject gateways, web portals, and automatic mailings alert system. Likewise, Fidelis (2018) investigated usage of ICT to support innovative library services in universities and to determine factors that influence ICT usage. Finding indicated that respondents had moderate skilled in using ICT. Some of the innovative services introduced as a result of ICT application were virtual desk, e-resources provision, database chat with a librarian, literature search, ask a librarian as well as in establishing institutional repository.

Library users generally have moved into the cyber space where access to materials is not determined by library opening and closing hour. This is because today users are now very much involved with technology and they need to be reached via same medium; hence, there is the need for library personnel to be where their users are, and this has made the use of ICT in library practices mandatory for library personnel. Library user's expectation from the library has become multi-dimensional, which requires multi-dimensional approach. They expect the library to provide both print and electronic resources for their use, as well as ICT facilities to enhance their access to global resources. This is an indication that users have become dominant users of electronic resources which require the use of ICT for their provision. However, Konapa (2014) advocated that the library too must change the way it provides services so as to meet users' need.

Chauhan (2004) equally opined that ICT has brought changes to the ways libraries are managed, in housekeeping operations and in the provision of services. Abdeirahman (2009) also reiterated that the emergence of ICT has changed the patterns and the modality of work in most university libraries, and this has affected tasks performance of library personnel. Librarians

have become facilitators and enablers of library use through appropriate deployment of ICT tools such as e-mail, social media, and SMS to facilitate information use by its clients. These various ways of using ICT have therefore necessitated that the library personnel remain versatile with ICT.

However, one of the ways of reaching out to users is by providing access through the creation of library portals/websites which enable users to access library holdings without having to step into the library from any location within or outside the country. This also has enabled university libraries to provide round-the-clock accessibility to information resources in the university libraries (Nina-Tavasaoli-Farahiand Tahamatan, 2014) while library users would not be constraint in their use of library resources. Library personnel have also been able to use various methods to engage users using various communication media provided by the Internet, that is, e-mail, news group, SMS and social media to reach out to library users. This was affirmed by Adetimirin (2009) in her study on the 'use of Internet by information professionals in some selected university libraries in the South-west'. Her finding indicated that library professionals used Internet for e-mail, chatting, discussion, as well as for exchanging academic content.

Mobile phones have impacted positively on personnel task performance. This was attested to by Priti (2013) who reiterated that mobile phone has impacted positively on the library. Smartphones are all over the place being used to access the Internet without going to the cyber cafe. Subject databases can be accessed while on the move once you have a password; information is now on users' fingertips. Tunbusun, Batcha (2013) studied application of ICT in academic libraries in Engineering, Arts and Science Colleges. Finding revealed that mobile phones were ranked first due to their accessibility anytime anywhere, while the use of the Internet was low due to non-availability of Local Area Network (LAN) facility. Mobile phones equally facilitated and improved the delivery of library services.

ICT has indeed altered the working patterns of personnel which has necessitated a difference in the perception of library personnel on ICT use. This was buttressed by Akpomi and Ordu (2009) who noted that technology innovations had the capability to change working patterns in many organisations. ICT facilities are important tools in the university libraries for achieving maximum performance. ICT use in library practice is very strategic to the information profession, most especially when you considered the magnitude of information being generated globally. ICT tools have enabled library personnel to manoeuvre information proliferation of this century. While Islam and Islam (2006) described library effectiveness as dependable on ICT, Nath, Bahl and Kumar (2007) reiterated that ICT facilities has transformed the entire library

landscape and has engendered new roles for library personnel. This was attested to by Adetimirin(2009), when she opined that the use of ICT in libraries had engendered efficient information provision and dissemination service delivery to users and influenced overall library performance.

Adeyinka (2009) submitted that ICT use in the library is dependent on human factors. This was equally affirmed by Mishra (2009) where he noted that human resources are much more important than any ‘microchips’ that is available everywhere today, because it is human being that will direct technology. Moreover, it has been observed that library officers are not well disposed to technology in public university libraries. The display of technophobia towards ICT use by library officers would deny the library requisite manpower. Ikem and Ojo (2003) affirmed this when they opined that the display of phobia for ICT use by library officers could result in waste of available manpower in the library. Apart from using ICT to carry out professional duties, library professionals are equally facilitators of ICT use within the academic community.

Teaching faculty relies very much on ICT to generate information that would enable them to be more competitive in their work as instructors and researchers. They need to have mastery of ICT tools and procedures. In order to do this well, they need the expertise of the library personnel. Library personnel therefore must be able to use ICT before they can teach others how to use it. Mazumda (2007) explained that library professionals have the responsibility of teaching their users the use ICT, and this presupposes that they already possessed versatility themselves. In order to use ICT profusely, library personnel require a thorough knowledge of ICT rather than just being familiar with it. In line with this, Adeyinka and Ayeni (2006) opined that being familiar with computer usage is not synonymous with possessing the ability to use computer extensively. Using computer effectively can be regarded to be a critical factor in information provision and use.

Magara (2002) in a research on ICT done in libraries in Uganda, findings revealed low level of ICT utilisation by library professionals. According to Annuobi and Edeka (2010), findings from this study showed that the use of ICT facilities to carry out functions in the serials section in federal university libraries in Southern Nigeria was low. Obinyan and Unuabor (2013) in their study on ICT applications for information provision and management effective service delivery in Nigeria university library showed that information professionals are making considerable use of ICT. While 40% use it in readers services; 35% use it in serials; 12% use it in cataloguing and classifications, though in spite of this, use is still not significant. Ajayi, Sorunke and Akinola (2013) found out that academic library staff was not using ICT for most of the

functions which include acquisition, cataloguing, lending, serial control, and others. This implies that academic library staff possessed different levels of ICT skills which could impact negatively or positively on their performance.

Islam and Islam (2006), in a study on 'New dimension in librarianship', differentiated the new sets of ICT from the old set, and itemised the ICT tools being used at present, reasons for using computer and its related technology. It equally examined functions, impacts and challenges of ICT use in libraries for service delivery. Rasa and Nath (2007) investigated ICT use in university libraries in Punjab with intent to establish quality and use of ICT applications. The study highlighted access to ICT networked information services and barriers hindering use. The result indicated the dominance of print within Punjab region. It further associated the quality of the service with the fusion of print and digital culture. Kyakulumbye, Olobo and Kisenyi (2013) study equally revealed that organisation support system, ICT infrastructure, knowledge and ICT skills had significant casual influence on information and communication technology use.

Mabawonku, Idowu, Oduwole and Ogungbemi (2010) study revealed that ICT was applied to cataloguing of library resources and service delivery only. It identifies ICT mostly used by librarians as CD ROMs and email facilities. Nwezeh (2010) studied the use of ICT at Obafemi Awolowo University. The study investigated 100 academics and 300 students. The result indicated that 65% of the staff uses e-mail; 55% use the World Wide Web; 35% use search interface; 11% uses file transfer protocol, while 9% uses discussion group. The study showed low use of the Internet resources.

Sivakumaren, Geetha and Jeyaprakash (2011) investigated 'ICT facilities in university libraries in India with the aim of identifying ICT availability, software in use and various electronic resources available in the university library. Findings indentified ICT tools (computer, printers, laptops, scanners, and photocopier) available in all the libraries studied. In all the libraries surveyed, 70% used barcode technology, provided the Internet facilities, subscribed to electronic journals, and also belonged to a consortium. Mamman (2015) in his study 'on the use of ICT in library services in six geopolitical zones of Nigeria', identified ICT facilities available in public library, perception of librarians' barriers to effective use, and strategies for improving and enhancing ICT. Findings showed that ICT facilities used in public libraries were computer, UPS, videotapes, television set, photocopiers and printers.

Siddike, Munyi, and Sayeed (2011) and Saravani and Haddow (2011) noted that poor facilitating situation stood as impediments to the use of ICT in professional practice by library personnel. Factors inhibiting the application of ICT in practice in library practice include non-

availability of ICT facilities, poor disposition of library personnel to ICT, lack of stable power supply, and poor skills of library staff. Afolabi and Abidoeye (n.d) in a paper titled 'information and communication technology as tools needed for effective library services.' They examined ICT facilities used for provision of effective services. These include computer, Internet, video conferencing, electronic mail, and network and expert system. The paper elucidated the role of library staff in the delivery of services and that of ICT in effective library services. It also highlighted factors hindering the integration of ICT facilities into library operations which include poor ICT infrastructure, low level of ICT equipment, frequent changes in technology, inadequate technical skills, erratic power supply, and technophobia.

In addition to this, Bahnabhai and Patel (2013) acknowledged significant changes that had been recorded in the area of automated cataloguing, circulation, online information retrieval, serial management and control, document delivery and CD ROM databases. They also acknowledged that ICT use in less developed countries has been very slow. Twari and Sahoo (2013) studied 'availability and use of ICT in library services delivery at the University of Rajasthan'. They found out that ICT was not well developed in these libraries. They identified lack of proper planning and frequent changes in ICT as hindrances to successful implementation. However, they highlighted the need for training and the implementation of solution to the problems encountered.

Bhangu (2013) in his findings on the use of ICT in academic libraries corroborated this. He alleged that the use of ICT tools in majority of libraries sampled in India was low. Akpan-Atata and Enyene (2014) carried out an investigation into awareness, availability and utilisation of ICT facilities, and result revealed that inadequate infrastructure, manpower, and finance are challenges facing academic libraries. The benefits of ICT in library practices could be regarded as overwhelming because they have altered work procedure and improve service delivery. ICT has made it possible to provide one-on-one library services to users. Materials could be requested for by phone calls (ask a librarian), and such will get delivered by postage, e-mail or social media. Awareness and contact can also be made through the social media.

ICT has improved awareness about currency of research globally, thereby preventing its duplication. Dhanavan, Esmail and Mani (2008) also claimed that the use of ICT plays an important role in enhancing professional development and research activities of professionals. ICT provides cheap, accurate, current and timely access to information sources, unlike what it used to be when the librarian sits behind piles of books trying to identify a pin from a haystack. ICT is currently used for information processing, storage, retrievals and dissemination by

personnel in the library, thus removing the repetition and the monotony experienced in the way tasks are performed (Okewale and Adetimirin, 2011, Bello Emmanuel, and Busari, 2013; Nina-Tavasaoli-Farahi and Tahamatan, 2014)

## **2.6 Demographics and ICT skills of library personnel in universities**

Demographic variables (age, gender, marital status, educational status, work experience) and others may affect ICT skill of library professional. In a review of literature done by Westerman and Davies (2000) on the effect of ageing on the acquisition and application of ICT skill to job duties, it was discovered that experience, physiology and mental factors rendered older adults at a disadvantage in technology skill acquisition compared to younger adults. According to Philip (2004), acquisition of relevant ICT skills for use in the workplace is as a result of self-directed learning by individuals. Therefore, the level of cognitive ability of older adults could impact positively on this kind of learning, thus bringing about adaptive behaviour in such individual. Generally, observation revealed that older people find it difficult to embrace change, most especially the ones that require them to learn new ways of doing things. While acquisition of technological skills may be difficult for an older person, it is presumed easier for younger individuals because this group of people is described as technology savvy.

Apart from this, Westerman and Davies (2000) remarked that ICT at present is very prominent in the school curriculum, and it is used in most examinations. With this level of exposure to ICT, younger people cannot but be versatile with ICT. Angeline, Swaroop Rani (2015) studied ICT literacy skill of library professionals in Trichy and the findings revealed a significant relationship among respondent's age, education, experience and technology skills. Bello, Emmanuel and Busari (2013) studied 'availability and accessibility of ICT facilities in Nigerian library'. Findings showed that majority of the librarians sampled were below fifty years and their computer skills were very high, lending credence to the fact that younger people were computer savvy compared to older librarians. Sergir and Marcano (2013) also noted that younger people are more creative and possessed physical vigour, perseverance, and alertness, hence the display of high technology skills by them. Finding from Ansari (2013) study revealed that work experience had impact on skills' formation amongst library professionals.

Contrarily, Ansari (2013) found out that gender did not have significant influence on library professionals' ICT proficiency. It was equally discovered that work experience had impact on the skills of library personnel. Hashim (2008) in a study on working women in Malaysia discovered that working women in Malaysia possessed average skill. The study revealed seldom use of Internet and e-mail at their workplaces, though there was no serious barrier to their

learning ICT skills. Nevertheless, it was found out that possession of ICT skill by women determines its use by them.

## **2.7 Demographics and ICT use by library personnel in university library**

Characteristics of the individual have the capacity to influence ICT use by library personnel in university libraries. Anyaoku and Ajala (2003) and Bhanabbai and Patel (2013) opined that, of all the three categories of resources in any organisation, human resources seem to be the most important. Others are physical and financial. In the library, the human resource determines the direction of the technology. Therefore, demographics which have to do with human characteristics cannot but have their own impact on ICT use by library personnel. Men and women manifest differences in the way they use ICT. Nevertheless, few literatures have supported the effect of demographic factors on ICT use in professional practice.

De Koning and Gelderblom (2006) studied 'ICT and older worker' the finding revealed that old workers did not make use of ICT when compared to younger workers. Older workers use less complicated applications than young workers. None use of ICT put the older workers at a disadvantageous position since ICT level of use has been identified to have positive effects on performance. In another related study carried out by Edom (2010) on 'Personal characteristics and academic staff utilisation of ICT facilities in Evans Enwerem University Owerri', it was noted that gender and work experience had significant influence on ICT use among academic staff. Oduwole (2006) findings showed a significant relationship among demographic factors of age and years of experience, computer and technology utilisation. According to Igun (2006), majority of library personnel fall between 41 years and above and this influences their views about ICT.

Kwon andZweizig (2011) studied information and communication technology, demographics, psychological factors and alternative service accessibility. Findings revealed that age and gender were not strong predictors of ICT use by people with alternative Internet Service Provider. In a study conducted by Hassan, Samah, Azril, Shaffril and Da'Silva (2011) on factors affecting ICT usage, findings indicated that education status and the position held are significantly related to ICT usage while income too is highly rated as having a significant influence on access and usage of ICT in libraries. Likewise, another study conducted by Owolabi (2013) on 'Socio-economic factors as determinant of ICT access and ICT use by staff of university libraries in Oyo State'. Findings revealed that age, educational level, and incomesignificantly influenced ease of access and ICT use.

On the effect of gender on ICT use, females gender are described as timid in their response to technology uptake while the males are described as profuse with ICT (Adeyinka, 2009). Igun (2010), in her study on challenges facing Nigerian university librarians on utilisation of information and communication technology, he identified insufficient skills, technophobia and male-dominated control of technology as some hindrances to the use of ICT by women. It was also ascertained that ICT usage by men was significantly better than by women. Lin, Tang and Kuo (2012) equally opined that women do not have enough confidence and rated their ICT capability lower than men. Corroborating this, Timothy (2010) indicated that men are highly enthusiastic, and they tend to develop positive feelings towards technology. Akpotor (2009) was of the opinion that lack of time is an impediment to ICT use by women. He reiterated further that the roles of women as caregivers, cooks and so on deny them quality time to explore and use ICT. This was also corroborated by Edom (2010) who stated that women do not have adequate time to access ICT compared to men, which may affect their ICT skills possession.

A related study carried out by Unegbu Amaechi Njoku and Opara (2015), on how socio-demographic variable influenced ICT use by lecturers in library schools in southeast. Findings showed that age had no influence on lecturers' use of ICT. Both male and female use ICT. Adepoju (2016) in her study on demographic factors and undergraduate utilization of ICT showed that the female students below ages 20 use ICT more than those between ages 20 and 30 while single students use ICT more than married ones. However, in spite of the fact that the male gender is proficient in the usage of ICT, there are situational constraints such as inaccessibility to the Internet, inadequate funding, inappropriate policy, unstable electricity, and unskillfulness which could hinder and affect their performance, thus preventing them from maximising their potentials in the library. Generally, library personnel require training in the area of ICT; otherwise, efficient and effective task performance, as well as optimal delivery of services would be jeopardised. The display of negative attitude by either gender can impede career advancement, as well as inhibit their task performance.

## **2.8 Demographics and tasks performance of library personnel in universities**

Demographic variables may affect library personnel either positively or negatively. According to Sergio and Marcano (2013), demographics determine individual disposition which reflects on mood, feelings and emotions which in essence can affect ones' performance. Demographics have been discovered to have poignant effect on task performance. Traeiari and Uli (2011) described demographics characteristics as an important constructs in psychological

research (Sturman, 2003; and Triaciyari, 2011). Kahya (2007) and Mohamad Shafрил and Uli (2010) opine that age was a determinant of personnel performance. Kotur and Anbazhgan (2014) regarded age as an important construct that can influence performance of employees.

Oyewole and Popoola (2015) studied psycho social variables and job performance of library personnel in colleges of education and finding revealed that age, experience, academic qualifications, rank and remuneration had significant relationship with job performance. Ugwu and Ugwu (2017) carried out a study in southeast Nigeria, using librarians as respondents. The results revealed that age, education, job positions and work experience significantly predicted task and contextual performance of librarians, with education as most significant predictor. In a paper by Faculty of Occupational Medicine (2004) on age employment' considered aging as a natural process involving physiological changes which can affect one's capacity, most especially in motor and visual body system, even though this may not affect cognition. This means human beings experience degenerative process of their physical body as they age, which may not necessarily affect their mental wellbeing. It is equally believed that level of cognition also declines with aging. Skirbekk (2004) argued that the decline in cognitive ability of older workers often leads to low productivity, though he claimed further that this can be ameliorated by experience and job knowledge. Park, Gutchess, Mead and Stiner-morrow (2007) buttressed this argument when they opined that increase in age was associated with decrease in mental and physical agility of individual personnel which may affect tasks performed by such personnel.

Muller, Lange, Weigl, Heyden, Archermans, Wilkenloh (2015) carried out a study on 'task performance of employees age 65, considering the role of mental capacity, cognitive functioning and job demand control. Findings indicated that age related changes affect mental functionality which also affect their performance. It is believed that good cognitive functioning is an essential resource for maintaining good task performance. It can be affirmed that good cognitive functioning predicts better performance. If cognitive ability is impaired, it may affect personnel performance negatively, and this has a lot of implications on individual task performance in the library, where such age group is dominant. Oyedipe and Popoola (2019) found significant relationship among educational status, work experience and task performance.

Observation has revealed that both young and older employees differ in their physical, psychological, emotional, intellectual make-up, and such may affect their performance. These differences affect the way and manner they respond to their environment, most especially the world of work (Grund and Westergard, 2005). While older adults are described as high performer, Shaffрил Mohamad and Uli (2010) affirmed that the younger ones tend to have lower

performance. Younger workers, on the other hand, according to Grund and Westergard (2005), usually displayed readiness and willingness to learn, physical resilience, and ability to grasp and adapt to new technology very easily. It was discovered that younger adults had speed in task performance when compared to older adults when using ICT.

Tishman, Looy, and Bruyeres (2012) also affirmed that older workers are much more disciplined in their attitude and commitment to their jobs. They displayed experience, knowledge, positive work habits, loyalty, punctuality, even temperedness, and respect for authority compared to younger workers who are more lackadaisical. Robinson, Judge and Songhai (2009) considered older worker as possessing experience, judgement, strong work ethics and being highly committed to quality but lacking in flexibility. Mohammed Shaffril and Uli (2010) equally mentioned the characteristics displayed by older workers. These include technical know-how, high working morale, and the awareness of quality. Increase in age is associated with high sense of responsibilities among older workers and this tend to reflect on the way they perform duties and responsibilities assigned to them.

According to (Allen (2006) and Ng and Feldman 2009), older workers multitask better than younger workers, while Westerman and Davies (2000) corroborated this by stating that older adults with high cognitive skills tend to have high level of performance. He recommended that this can further be enhanced with experience. Skirbekk (2004) buttressed these differences between age groups further when he concluded that older individuals learn at a slower pace compared with younger individuals. He attributed this to reduction in memory and reasoning abilities of older personnel, which corroborates the fact that older adults experience decline in their level of cognition.

Narges, Abdulahi and Bolong (2011) studied the relationship between OCB and task performance and outcome came out with a result which showed that with increase in age, employees tend to internalise rules and procedures guiding a particular task better than the younger ones. Tubre, Winfred and Paul (1996) also argued that older workers were much more stable on the job more than young workers and also recommended that training opportunity should be given to them as it pays off for organisations. Grund and Westergard (2005) supported the fact that organisation should reflect all age groups in its human resources so as to benefit from their contributions towards its growth when they affirmed that both categories of human resources are essential for productivity.

Warr (2001) and Barnes, Simeaton and Taylor (2009) also supported this positive attributes of older people in employment by describing them as more reliable, conscientious and

effective, most especially when working in teams. In many European countries, age is being disregarded as a basis of employment because they found that emphasis on age would not allow organisations to retain those who possess accumulated experience gained over the years. Sergir and Macarno (2013) carried out a study on emotional intelligence and demographic profile variables among bank managers in the Middle East, and the finding revealed that task performance significantly related to demographic profile variables such as age, civil status and educational attainment.

Quaresh, Bashir, Saleem, Javet Sadat and Safdar (2013) studied determinants of job performance in private and public universities of D. I. Khan, and findings revealed that age, education, and experience were found to have high correlation and significantly impacted on job performance of employees, whereas gender and marital status were not significant. Kotur and Anbazhagan (2014) studied the influence of age and gender on performance of workers. They found out that age have direct effect on their performance in varying degrees; they explain further that workers in medium age range perform better than those in the extreme age group. Oyedipe and Popoola (2019) investigated how age, job status, ICT skills and use influence task performance of library personnel and found that age, and job status, ICT skills and use had significant joint influence on task performance.

Gender is another construct that can have either positive or negative influence on task performance. Talmud and Izraeli (1999) described gender as an institutionalised characteristic of the workplace which reflects in the way, manner of thinking and structure instituted in different occupations within an organisation. Gender can equally be seen as the differences between male and females which manifest biologically and socially (Abbas, Hammed and Waheed 2011). Mohamad Shaffril and Uli (2010) findings on the influence of socio-demographic factors on work performance among employees of Agriculture Agencies in Malaysia showed that there is no significant difference between male and female employees' work performance. Golub (2009) stressed male domination in the management cadre in spite of the high population of the female gender in librarianship. Even when it comes to the issue of technology in the library, she emphasised that there is equally male domination. Another study by Nasir, Mohammadi, Shahrazad, Fatimah, Khairudin and Halim (2011) revealed that gender and education influence relationship between OCB and task performance.

Sergir and Marcano (2013) also regarded women to be more significantly responsible than men, while men have stronger self regard and easily cope with pressing issues and stressful tasks compared to women. The multi-task roles of the female gender can promote or become a barrier

to their efficiency in task performance on the job. This might be the reason why the male gender is considered to have higher performance than the female gender, though the argument is that the female gender's attention is usually divided between their career and their homes. This will have consequential effects on their performances because care-giving responsibilities often lead to absenteeism. This was debunked by Elnaggar (2007) who described women as being more organised, dedicated, meticulous, persistent, and loyal. Robinson, Judge and Songhai (2009) opined that women are conformist, stable in employment more than men. Mohamad Shafril and Uli (2010) also found out that women have better working performance than men.

The librarianship profession is characterised by higher female gender population when compared to male (Iwe, 2000; Osarenren, 2009; Golub, 2010), which then means that high level of performance is expected from the female gender. Though high level management posts seem to be dominated by the male gender, this might not be unconnected with their aggressive job mobility. Robinson, Judge and Songhai (2009) described men as aggressive in nature and have higher expectation of success more than women. In librarianship, men are highly mobile. This means the male gender changes jobs much more frequently than the female gender. Osarenren (2009) associated males with tasking job while females are seen as home keepers. Kotur and Anbazhagan (2014) investigated the differences in performance of workers in India to determine how gender influences the performance level of workers. Findings revealed that gender had effect on performance of workers at varying degrees. They found out that women were more productive than men.

Most employers discriminate against married women because they believe that the responsibility of motherhood would prevent them from being effective as opposed to married men whom are assumed as being more responsible and dutiful when married (Jordan and Zitek, 2012). This assertion is usually based on preconceived notion that marriage makes women less committed to their jobs while men are perceived to be much suitable for employment than women even if they were married (Nadler and Kufal, 2014). Though married people are generally believed to be responsible; however, married males are usually much more appreciated by employers because it is believed that marital status elevates men's performance, while that of women tends to nosedive after marriage (Subangco, 2016). While married women were considered to be less effective on their job, married males were considered to be more effective.

However, Subangco (2016) argued that family responsibility can motivate both male and female individuals to be committed to their organisation by working for longer hours. Jordan and Zitek (2012) also shed light on the fact that single women were much more favoured and

preferred by organisations because they believe that these women would be able to devote more time to their job because they have fewer distractions compared to married women.

Single male and female are considered to perform better at work because they are able to sacrifice time by working for longer hours. This is due to their being less engaged after work (Jordan and Zitek, 2012). This was debunked by Morris, De Paulo, Hertel and Taylor (2008) who were of the view that singles, either male or female, could be irresponsible, maladjusted and immature than married people, which may have implications for their task performance behaviours while on the job. Padamanabhan and Magesh (2016) studied the effects of marital status and performance level in the information technology industries. Results revealed no significant difference between marital status and the level of job performance of employees.

Educational status is another variable, which can equally have implication for task performance behaviour in the library. Educational level is a determinant of a person's worth. It also indicates a person's level of skill as well as his productive capability (StijdenTijdens, 2005). The level of education received by individuals affects their cognitive ability. Highly educated worker will have more diverse tasks to do than those with lower education, most especially with ICT. Ng and Feldman (2009) conducted an empirical study on how education contributes to performance and found that educational level highly correlated with core task performance. Oyedipe and Popoola (2018) found out that education and work experience significantly influenced task performance. McBey and Karakoowsky (2001) found education and work performance to be casually related. Employees with lower education are usually more complacent about performing tasks when compared with highly educated workers.

Khaya (2007) studied the effect of job characteristics on job performance and findings showed that educational level negatively correlated with task performance. He argues further that tasks diminish as education increases. Highly educated personnel are regarded as being much more productive than less educated ones. This was attested to by Schermerhorn (2008) when he stated that people with relevant abilities, knowledge and ideas are of high economic value to any organisation. Library personnel should be competent in information provision and handling, based on the repertoire of knowledge they had acquired during their school preparation, while on the job, and through professional trainings. Well internalised accumulated knowledge and skills will translate into experience for the university library personnel. Educational status significantly predicted task performance, (Oyedipe and Popoola, 2019)

Work experience is another variable that is vital to every organisation. Bello and Mansor (2012) described work experience as indicator of workers' exposure to the working ethics,

responsibilities and contributions to one's profession. Experience helps personnel to be effective on their job. Highly experienced librarians are regarded as asset to the library. This was confirmed by Igun (2006) in a study on 'Human Capital for Nigerian Library in the 21<sup>st</sup> century'. Her finding revealed that there were more experienced librarians than inexperienced ones. It is pertinent to note that experience determines employees' level of productivity. Experience is the outcome of several years of engagement. Dokko, Wilk and Rothbard (2008) agreed that experience brings about diverse knowledge and also brings to the fore creativity and better performance. Their research findings revealed that prior related experience positively affects task knowledge and skills. In a related study on the relationship between work experience and job knowledge by Longoria (1997). It was discovered that work experience predicts job knowledge and that cognitive ability and difficulty of tasks moderated task experience and job knowledge relationship.

Kahya's (2007) study revealed that increased experience would result in job knowledge, and this will have positive effect on employees' performance. On this note, one can say categorically that the more experience library personnel possess, the more they would exhibit an effective and efficient task performance. Motowidlo and Van Scooter (1994) distinguish task performance from contextual performance by stating that experience and personality influence performance in various ways. While experience is associated with task performance, personality is associated with contextual performance.

Many previous studies have tried to establish relationship between income, job satisfaction and job performances. Income is not just about salary per se, income has other components and these are salaries, bonuses and allowances. The benefit of a good income is that it enables individuals to meet their basic needs, improves one's wellbeing and living condition and promotes one's social status in the society. Akinyele and Aina (2007) described income as that which determines the economic worth and the social status of an employee. Mohamad Shaffril and Uli (2010) regarded income as an important motivator of employees. Akinyele and Aina (2007) investigated the effects of employees' compensation on their performances and found no significant correlation between employees' remuneration and their performances. Shehu (2018) regarded the reward system as being very important to the development of staff in the university library.

Idrees, Xinping, Shafi, Hua, Nazeer (2015) studied the effects of salary, training and motivation on job performance of 310 respondents in 16 universities in Islamabad and Rawalpindi. The study examined how salary relates with motivation of workers on the job as well

as their productivity. It equally identified training as being essential to learning new things. Finding from the study showed that salary can be strongly associated with job performance when compared with other variables, lending credence to the importance of income as an enhancer of performance.

Kamal, Hamif (2009) define income as a motivator that provides opportunity for improving staff performance within the university system. Bryson, Freeman, Lucifora, Pellizzar, and Perotin (2011) revealed that a good income is associated with improved employees' performance. Agba, Mbotto and Agba (2013) carried out an investigation into how wages and other conditions of service are critical to workers' performance in Nigeria, and findings revealed that regular and good wages, influenced workers performance. Akanbi (2011) also established that income has a role to play in determining employee performance. Warrach and Ameen (2010) claimed that opportunities to learn new skills, grooming, career development, having status, and communication were much more preferable to job security and fringe benefits by employees.

According to Akintoye (2000) was of the opinion that money is the most significant strategy used by employer within an establishment. Personnel desire and look forward to better pay packages that would enhance their economic power. One of the ways of increasing employees' performance is by giving appropriate financial reward that is commensurate to their performance. When the pay package is good, personnel would prefer to stay in a job of the same status, even when he or she is faced with the challenges necessitating a choice between two opportunities (Young, Milner, Edmund, Pentsil, and Bronan, 2014). Job status and income may have effects on the efficiency and effectiveness of library personnel. Effective handling of these two constructs by the library managers could determine the degree of effort and commitment an individual would display towards assigned tasks. According to Bonner and Sprinkle (2002), incentives stimulate efforts and channel employees' efforts at achieving more.

According to Knust, Knust and Antiwi (2013), when necessary incentives are not put to use by relevant authority, it tends to breed discontent, lower morale and can impact negatively on tasks performance of university library personnel. It is important to note that, there is a regulating force within individuals which can restrict or limit their performance. To this extent; the demographics of individual personnel plays major role in the determination of performance at the individual level. McCloy, Campbell and Cudek (1994) found empirical evidence to buttress individual differences and variables as having effects on performance dimension of procedural knowledge, declarative knowledge and motivation. Bamigboye, Buraimo and Ajani (2008) examined job satisfaction and performance of academic librarians in Nigerian universities and

discovered that educational status was a critical determinant of welfare packages which have a far-reaching effect on task performance. Another relevant study conducted by Tharkur and Sharma (2019) advocated for fair and adequate compensation as well opportunity to grow ones career as important incentives that can enable personnel perform duties and responsibilities effectively.

## **2.9 ICT skills and task performance of library personnel in universities**

Possession of high ICT skills has the capacity to improve performance of library personnel. Knolding and Kroa (2007) described ICT skill level of the workers as very vital for organisation's future in terms of competence and effectiveness. Possession of ICT skills by library professionals is a compulsory requirement in the library today; that means library personnel must work with ICT. They need ICT skill to be able to function in this era of technological innovation. Okiki (2018) identified productivity, improvement in quality, increased efficiency, reductions in total errors, increase performance and efficient control of library work procedure as indicators of technological change in the library. ICT has the capacity to impact individual performance by increasing individual effectiveness. This is why ICT is described as an important factor of productivity and an enhancer of performance (Koellinger, 2006). According to Kenneth and Hossain (2008) ICT has brought about dramatic changes in task-level processes and workflow of individuals and groups. ICT is an enabler of work practices in most organisations, especially the library.

Various related studies had been carried out to identify gaps in ICT skills possessed by librarians. Islam and Islam (2007) conducted an empirical study on ICT utilisation in selected libraries in Bangladesh and identified lack of skilled manpower as impediment to the use of ICT in those libraries. In a study conducted by Babu, Vinayagamoorthy and Gopalakrishnan (2007) on ICT skills of librarians in engineering educational institution in Tamil Nadu, findings indicated that librarians had considerable basic skills in ICT, but had not acquired the required skills needed for networking in a digitalised library. Observation revealed that most library personnel suffer from technophobia and therefore irk away from using ICT to carry out their job tasks.

However, without developing confidence in using ICT to carry out job procedure, achieving the skills needed might be a mirage. ICT is a growing phenomenon that requires constant updating of skill to be able to align with development on the field. Nath, Bahl and Kumar (2007) investigated the ways librarians were using ICT, level of ICT, knowledge and skills and the problems encountered in using ICT. Findings indicated that librarians had low ICT

skills level while there was equally inadequate formal training among librarians in Chandigar city libraries. This lack of ICT skills prevalent in most libraries has not been boldly tackled thus leaving critical gaps in skill development in the library.

Another study conducted by Mohammad and Abdul Sukor (2010) on ICT skills among library professionals in Calicut University revealed that majority of librarians surveyed do not have the confidence needed in handling high level task with ICT. In another study conducted by Batool and Amen (2010) on the state of technological competence of library professionals in university libraries, findings revealed that out of 18 professionals, only eight were skilful in word processing, skilful in formatting, inserting and applying different styles to document while only two can create personal template and insert hyperlink. Library personnel need comprehensive knowledge of ICT and the skills to implement technology without which all the funds injected into ICT adoption will go down the drain. Building capacity of personnel is vital to any organisation seeking global recognition.

Haneefa and Sukkor (2010) studied ICT literacy skills of library professionals in Calicut University, Kerala. Findings revealed that substantial number among the library personnel had confidence in using ICT for routine activities only. Satpathy and Maharana (2011) examined ICT skills of library and information professionals in engineering institutions in Orissa, India. They identified the type of ICT skill possessed and the application of these skills in the modernisation of libraries. Their findings revealed the need for librarians to acquire knowledge and skills on ICT continuously to enhance services provision to users. What should be advocated is constant development of capacity among different stake holders in the library. A study conducted by Siddike, Munchi and Sayeed (2011) on adoption of ICT in university libraries in Bangladesh, findings revealed lack of ICT related related knowledge, skills among the personnel as well as inadequate infrastructure.

According to Mathew and Baby (2012), ICT offers library personnel the chance to render worthwhile services to their users using ICT. Shivaputrapa and Ramesh (2013) in their study on ICT skill of library and information professionals working in the Engineering College libraries in Karnataka, India, it was indicated that a significant difference existed between different designations on various aspects of computing skills and Internet-related skills of library information professionals. This perhaps gave room for mentoring of one another. However, all staff working in the library must possess ICT skills in other to fit into job rotation style within the library. Ansari's (2013) studied ICT skills proficiency of library professionals in university

libraries in Karachi. Finding revealed that information professionals were not proficient equally in ICT skills, though substantial number were moderately proficient.

Seena and Pillar (2014) in their study on ICT skills among library professionals in Kerala University found out that library professionals had average skills. Nina-TavasaoliFarahi and Tahamatan (2014) carried out a study on medical librarian's level of Information and ICT skills in Iran and findings revealed that medical librarians had adequate skills in the integration of technological systems into the library but had medium skills in library automation, data standardisation, system analysis, programming, evaluation and utilisation. Oduwale (2006) conducted a study on information technology skill acquisition among librarians, using respondents from university libraries and research libraries. He came up with the finding that indicated that librarians in university libraries were poorly skilled when compared with librarians in research libraries.

Ugboma (2006) equally found out that librarians who are ICT literate in mobile telephony were 100%; electronic mail were 100%; fax, 27%; and ability to communicate online, 19%. Chigbu (2007) studied ICT skill of academic librarians in Ahmadu Bello University and found out that majority of the librarians studied were ICT literates which means there is high level of ICT literacy among librarians. By the nature of their job responsibilities, they are challenged to acquire ICT skills while other critical staffs are lethargically about acquiring ICT skills. Library personnel ICT skills must be comprehensive in this age.

In a study conducted by Adeyoyin (2009) on ICT literacy skills in West African university libraries which comprise of Francophone and Anglophone countries, findings revealed that majority of the librarians were non-literate ditto for paraprofessionals. Among the non-academics assessed, finding showed that majority were non-literate in ICT use. Imperatively, it can be deduced that the staff had low ICT skill as majority did not know how to utilise certain services offered by different websites particularly meant for information professionals. It is therefore pertinent that library personnel need to scale up their ICT skills for effective performance of duties. Ademodi and Adepoju (2009) studied computer skills among librarians in academic libraries in Ondo, using 21 librarians as respondents. They found out that few librarians were able to use computer to carry out library functions.

Krubu and Osawaru (2011) carried out an empirical study on the impact of ICT on library services at the University of Benin and Ben Idahosa University Libraries in Nigeria, and their finding revealed that lack of technical know-how is one of the hindrances militating against the use of ICT for services delivery. Obaje (2014) conducted a study on assessment of levels of

computer literacy skills of library personnel in university libraries in the North central zone and the north-east, and his findings showed that computer skills' levels among library professionals in the Northeast were low. The low level ICT knowledge and skills was attributed to general lack of training among librarians. Salleh Yaakub and Dazulkifli (2011) studied the influence of ICT skills on job performance of public service employees in Malaysia. Findings showed that ICT skill levels and training did not have relationship with performance. This is quite unfortunate because training is essential for ICT skills enhancement which will have consequences on individual task performances.

Hussain and Nazim (2015) equally indentified low level ICT skills as impediment to ICT use by library personnel in Indian academic libraries. Possession of ICT skills by library personnel is becoming synonymous with efficient and effective service delivery. Adeyinka (2009) highlighted core services being handled by library personnel, which require the display of e-skills. These include OPAC provision, online networking, online acquisition, online references, online circulation, selective dissemination of information and current awareness. Ugochukwu (2015) investigated digital literacy skills in university libraries in Edo and Delta States. Findings revealed that the ability to use electronic mailing system, mobile phones, Internet surfing were the major digital skills common among librarians. Other skills in tandem with enhancement of library services should be developed and used. Information and communication technology would play crucial roles in task performance among library personnel in public university libraries, while library management must provides the enabling environment.

Oguche (2017) studied impact of ICT skills competence and job performance of librarians in federal universities in Nigeria and findings indicated that 90% of librarians ICT skills and competence had impacted on digitisation, registration and generation of user statistics and job performance of librarians. In fact, the finding confirmed the importance of ICT skills as basic requisition for carrying out duties and responsibilities in Nigerian university libraries. Knolding & Kroa (2007) equally submitted that ICT skills are very important prerequisite for succeeding at work in any organisation.

Library personnel faces many challenges in their attempt to acquire ICT skills. Baro and Eze (2015) identified some of these challenges confronting information professionals on skills acquisition in South-south and South-east. These are lack of training, poor Internet connectivity, and inadequate facilities. ICT skills requisition of library professionals showed that they must be able to navigate the Internet with relative ease and these skills involved must be passed to library users to build their competency in the use of technology provided for such purpose. Nwokedi,

Nwokedi, Amkpa and Ogugua J. (2013) found that browsing had significant positive effect on services delivery advocated for browsing competency among librarians to enhance service delivery.

In relation to this, Khiste, Veer and Maskee (2011) investigated search engine as effective tools for library professionals in navigating the Internet. It was discovered that the knowledge of search engines and its use is highly beneficial to library practitioners. His findings revealed that the use of search engines saves time and effort and deliver at an unprecedented level. Khan (2013) investigated library, librarians and library services in a web 2.0 environment. He viewed web 2.0 as emergent technology which can have powerful effects on managerial decisions on planning, budgeting and marketing.

## **2.10 Access to ICT and task performance of library personnel in universities**

Access to ICT can play significant role in the performance of duties and responsibilities in university libraries. Ansari (2013) found that despite the high competence of new library professionals, most of them could not use ICT to perform necessary tasks due to inaccessibility of the ICT infrastructure. ICT facilities must be available and accessible for practitioners to perform job duties and functions with dexterity. Warshaurer and Tina (2010) identified factors militating against access to the Internet as language barrier, individual literacy level, computer skill level of individuals, unsuitable online content and unavailability of instructional and social support.

Many libraries do not consider access to ICT facilities by library personnel as being crucial to library operations compared with the emphasis placed on availability for the purpose of accreditation. This means digital library operations is still at infant stage in most libraries. This put library personnel in difficult situation in their attempt at providing efficient service delivery. Ajidahun (2004) revealed in his study that application of information technology in libraries operation was at developmental stage and reiterated that socioeconomic, political, and administrative factors were seen as constraints to the computerisation of university library operations. This will definitely impact negatively on ICT use.

Ademodi and Adepoju (2009) studied computer skills and competencies of librarians in Ondo and Ekiti States with the intention to determine computer facilities in these academic libraries, the functionality of these computers, what they are used for, how the librarians acquired their skills, and the type and the package being used. The study revealed that the level of access provided by libraries to library personnel was very low because few computers were installed to execute tasks. This definitely will limit productivity in that library. Allocation of computers to few

individuals cannot guarantee effective task performance. However, this study did not determine how accessible these computers are to library personnel.

Bello, Emmanuel and Busari (2013) carried out an empirical study in some selected libraries, and findings revealed that in majority of libraries studied, ICT facilities were available but not accessible. Accessibility is the key to usage. Lack of access has been a major constraint to practitioners. According to them, multimedia projector, Internet facilities, and office equipment were the only ICT facilities that were accessible to librarians. Adebayo and Adesope (2007) studied awareness, access and usage of ICT by female research extensionist and findings indicated that respondents lacked adequate access to ICT while 55.7% and 0.4% female researchers use ICT 3-5 times a week. Having computers or laptops one's table with adequate access to the Internet, alongside with other peripherals will spur performance and impact positively on service delivery. Constraints to ICT identified by the study include inadequate funding, erratic power supply, poor technical and physical infrastructure. Igwbuike and Agbo(2017) investigated ICT application to library and information services in special libraries in Nigeria using 43 librarians and 300 library users. Findings revealed that most ICT facilities were not functional. These include library software, OPAC, Internet facilities and network facilities.

Funding is one of the major challenges facing library management in their bid to achieve versatility in the use of ICT. The study recommended improvement on electric supply and the use of consortia to reduce the cost of ICT, thereby promoting access. Okiy (2010) and Oghenetega, Umeji and Obue (2014) further highlighted restricted access, lack of ICT skills, poor network and lack of adequate infrastructure, most especially poor Internet facilities, as problems facing ICT use among librarians. Further challenges as highlighted by Abubakar (2012) in a study on 'challenges to digital divide at Abubakar Balewa University Bauchi, using 20 library professionals showed that computer, Internet connectivity and other related ICT facilities were available in the library but were not utilise. It revealed also, that library operations were still carried out manually. Khan and Bhatti (2012) conducted an interview to identify the problems confronting library professionals in developing countries and findings indicated that most libraries lacked ICT infrastructure. In spite of the coverage of this paper, the state of access to ICT by personnel was not thoroughly examined.

However, Shehu, Urhefe and Promise (2015) studied accessibility and utilisation of Internet service in Nigerian libraries found out that the Internet was very accessible to library professionals. This seems contrary to what is obtainable practically. However, the high cost of

providing the Internet connectivity must have prevented the library from attaining best practices. Igwebuike and Agbo(2017) identified inadequate funding, software problems, management problems, poor electricity supply, lack of staff and high cost of maintenance of ICT facilities as factors inhibiting ICT accessibility in these libraries. Gupiyem,Gupiyem and Banwar(2019) in a study on Access to ICT as correlates of e-resources usage among postgraduate found out that accessibility to ICT facilities was low.Most libraries are bedevilled with low bandwidth which scuttles the efficiency of personnel on the job.

### **2.11 ICT use and task performance of library personnel in universities**

Task performance in the library equally requires adequate resources and infrastructure to enable employees execute tasks effectively. Library personnel task performance could be facilitated by using ICT facilities to perform functions, as it is capable of improving workers' feeling, and facilitating improved productivity and creativity among personnel (Ben Yousef, Martins and Nessrine, (n.d)). Provision of appropriate facilities will propel library personnel's desire to achieve optimum performance. Sonnentagand Freese (2001) affirmed that technology plays crucial roles in most work processes. Therefore, an enriched environment with right infrastructure would enable effective task performance among university library personnel.

The relevance of ICT to effective performance of duties and responsibilities cannot be understated. A survey of academic libraries was carried out by Raman and Rao (2003) in Central University Library in India for the purpose of examining ICT use in housekeeping operations, knowledge sharing, as well as identified challenges facing librarians on ICT applications. The study collected data using questionnaire and the result indicated that ICT was very useful in the execution of routine operations and in carrying out online services. This explains the importance of ICT in executing tasks in the library. In another related study conducted by Ugboma (2006), in a study on ICT literacy among practicing librarians in Delta States. She examined the the state of ICT among librarians and the compliance level in the libraries. The study utilised questionnaire to collect data and self assessment instrument for librarians. Finding indicated that respondents were quite familiar with the Internet use at home rather than during official hours which is an indication that library professionals in this library did not use ICT during working hours. This also implies that official duties were not carried out with ICT facilities while task performance in this library was not ICT-driven. Therefore, since task performance is not facilitated by technology, it cannot but affect performances negatively. Though this study seems to be

comprehensive in its conception, however, assessment of librarians was not based on 360 degree to prevent subjectivity and results could not be generalised based on its small coverage.

Annuobi, Nwakwo, Oga and Bernard (2007) carried out a study on availability of ICT facilities for library operations and finding indicated that only two among the four academic libraries surveyed showed evidence of using ICT in library operations. This is an indication that most library in the developing countries paid lip service to the use of ICT. Islam and Islam (2007) studied use of ICT in Bangladesh libraries. They examined the state of ICT implementation and the extent of adoption of various ICT tools. Findings revealed that library personnel did not have adequate knowledge of ICT that would propel its use among many others. The survey also revealed that ICT was used for serial control only. To corroborating this, Saka and Abdurahman (2008) stated that library personnel were not using computer to carry out tasks and that this non-use of ICT has resulted in poor performance of librarians. The study further revealed the differences among universities at the level of computer utilisation.

Abdulahi and Haruna (2008), in their study on utilisation of ICT for service delivery in libraries, the study showed that while Adamawa University recorded intense use of CD-ROM, Abubakar Tafawa Balewa University recorded higher e-mail utilisation than other universities. Their finding also indicated that universities that recorded high level of computer utilisation were efficient in service delivery. This is an indication that ICT is important for efficiency and effectiveness in practice among personnel.

Krubu and Osawaru (2011) conducted a study on the impact of ICT in Nigerian university library to determine the level of computerisation of academic libraries, how useful were ICT resources, the skills and knowledge of library personnel, and the challenges associated with ICT use in academic libraries. Findings showed the two university libraries studied were automated, while ICT facilities were used in three different units in the library to carry out library functions. ICT was not comprehensively used and this had its own effect on task performance of other units which has not been using technology to enhance their outputs.

Various studies have established the relevance of ICT to improved performance of employees. Al Challaf (2006) conducted a study on 'Librarians and Technology in Kuwait' and findings indicated that technology had made their work easier while the speed of accomplishing a task had increased and productivity had become more accurate. Majority indicated that technology has enabled them to have control over their daily tasks. ICT has been confirmed as having contributed immensely to workers' flexibility, collaboration and cooperation, which impinge on higher productivity and better creativity.

The need to use ICT to improve the performance of library personnel is highly important in this era of information explosion. This was corroborated by Venkatesh, Bala and Skyes (2010) in their study on impact of ICT on employees' performance, using socio-technical theory to describe the effects of ICT on employees' performance. Findings revealed that, though ICT was able to improve employees' job characteristics but the job performance of employees was low. Factors such as situational barrier, difficulty in learning, culture shock and employees' valuation were seen as constraints to ICT use.

Benefits derivable from the use of ICT are numerous and overwhelming. According to Aiyebilehin (2011) on application of ICT to collection development tasks, he indicated that ICT helped to save time, promoted quick delivery of information materials, and enhanced communication with publishers and vendors. Haliso (2011) finding revealed that ICT provides considerable benefits in work assessment, reduction in cost, efficiency and enhancement of services to customers. In another related study by Dauda and Akingbade (2011), results showed the adoption of technology improved the performance and profitability.

On the benefits of using ICT in the library, Salam and Bamigboye (2011) found out that the use of ICT improve efficiency and effectiveness of library personnel. They reported that ICT training was needed to improve efficiency and performance. ICT skill, access and use play important roles in determining the flow of work within the library setting. Library personnel must therefore ensure that possession of ICT skill is given top priority so that they can relatively use ICT to carry out duties and responsibilities. In a related study by Nwakowa and Okoli (2012) on the influence of ICT use on secretaries in government ministries in Nassarawa State using 84 respondents, and the study indicated that ICT use has influenced the performance of secretaries, allowing timely delivery of information, accuracy and effectiveness at work. Priver (2013) carried out an empirical research on effect of ICT utilisation on employees' performance in Uganda Christian University, and the finding revealed that ICT knowledge and skills improved management support and peer support which led to high employees' performance. He recommended human capacity building and peer education to sustain ICT use by personnel and improve funding to enhance ICT participation and integration.

Erasto (2013) conducted a survey on private university libraries to determine the impacts and adequacy of ICT use, for the purpose of efficiency and effectiveness, and findings revealed that ICT has impacted on service delivery, enhanced speed of delivery, increased flexibility of library operations and access to unlimited information. Elsaadani (2013) studied the influence of ICT on workforce productivity in an Egyptian organisation, and findings revealed that ICT had

contributed to organisation's productivity and overall library performance. James (2013) studied the effects of ICT on performance using secretaries from both public and private sectors as respondents. Results indicated that the use of computer, telecommunication and video techniques were significantly related to secretary's performance in the public sector.

In a related study by Abbas, Musaffar, Mahmood, Ramzan and Ul Hassan Risvi (2014) carried out a study which investigated the effects of technology on the performances. Findings indicated that technology improve the productivity of employees, saves time, reduces workload, prevents mistakes and frauds and enhancing quick access to information thus allowing personnel to deliver quality service. Findings from Omosor (2014), on effects of technology on librarians in academic libraries in Nigeria, showed that respondents appreciated the use of ICT in the workplace and affirmed that though technology has given them added responsibilities, it has increased their accuracy and the speed of accomplishing tasks. In spite of this, lack of training and inadequate facilities has resulted in higher stress for the librarians.

Abosede and Akintola (2015) studied ICT facilities utilisation by secretaries and findings showed significant relationship between ICT facilities utilisation and job performance of employees generally. A related study by Sharma (2014) on impact of ICT on library automation, findings showed that the use of ICT improved management of libraries, the promotion of user friendly environment and increased efficiencies among library practitioners. In a study conducted by Mukoto (2015) on the effects of workplace on productivity and decent work, the findings revealed that ICT has reduced monotonous work and sped up decision making in university libraries. Inyang and Inyang (2015) investigated ICT use as correlates of job effectiveness among 225 library staff in the University of Calabar, Nigeria, and findings indicated that staff use of the Internet, e-mail, PowerPoint and computer were significantly related to staff effectiveness. Result from Oyedipe and Popoola (2017) indicated that level of ICT used among library personnel in public university libraries was moderate while ICT use was significantly related to task performance of public university library personnel. Okiki (2018) conducted an investigation on the enhancement of job performance of librarians through technological change. The outcome showed that technological change in academic libraries influenced librarians operations and activities.

Oyelana and Thakhathi (2015) examined the role of ICT in enhancing employees' performance and identified constraints to operational challenges being experienced which included non possession of relevant ICT skills, lack of understanding of ICT structures and training challenges. Aiyebilehin (2011) found erratic power supply and inadequate infrastructure

to be hindrances to effective use of ICT in collection development. They identified unstable power supply, lack of skills by librarians and inadequate funding of ICT as constraints to the use of ICT in performing tasks. Mathew and Baby (2012) identified constraints to ICT which include computer breakdown, inadequate computer in the library, and inadequate computer skills. Abosede and Akintola (2015) and Oyelana and Thakhati (2015) suggested that training will improve and increase employees' performance. This will enhance the performance of personnel within the library and give the library a positive image in the academia.

## **2.12 Theoretical framework**

Different theoretical approaches have been used to describe job performance but this study was anchored on Campbell 'Theory of Job Performance (1990)'. According to Campbell 1990, performance is an individual level variable which is quite distinct from other types of performances that are organisational and national. Campbell's Theory of Job performance is a multi-dimensional construct. It viewed performance as behaviour as well as outcome of behaviour. Campbell (1990) described performance as comprising of three direct determinants. These are declarative knowledge, procedural knowledge, and motivation.

Declarative knowledge which consists of facts, principles and ability to set goals and targets. This is further predicted by indirect determinants: abilities, personality, interest, trainings, experiences, and aptitude interaction. Procedural knowledge has to do with the acquisition of skills such as cognitive, psychomotor, affective, physical, and interpersonal.

Motivation can be intrinsic, as well as extrinsic.. Personnel also need to be motivated to perform at their best. ICT availability for effecting job roles is source of motivation.

The extent to which tasks are performed should be in accordance with laid down principles and procedures. This depends on the educational exposure and the level of work experience of library personnel. Acquisition of ICT skills by library professionals is expected to have positive impact on task performance of library personnel.

Library personnel are expected to possess declarative knowledge, procedural skill and motivation in order to use ICT actually in executing tasks. The degree of efforts an individual exerts on task execution can equally depend on the level of incentives given by the employer. Income and job status when used positively can be described as sources of motivation that can prompt individuals to perform beyond expectation. Availability of conducive atmosphere in terms of providing access to ICT facilities can also be described as incentive which will encourage individuals to perform above expected limits. The use of incentives to actualise task performance

of library personnel can prompt exertion of efforts. Personnel exert efforts to bring about better performance on the job. Provision of access to ICT and its use in carrying out library tasks can be viewed as motivating factors that could influence performance positively. Campbell (1990) and Campbell, McCoy, Oppler and Sager (1993) further proposed an eight-factor model of performance using analytical research and titled it 'Factor Theory of Job Performance'.

The theory proposed by Campbell (1993) analysed various dimension of job performance that could be applicable to all jobs as task specific behaviour, non-specific task behaviour, oral and written communication, effort, personal discipline, helping out groups/colleagues, supervisory/leadership, and management. Core task performance, requires the demonstration of efforts and maintenance of personnel discipline which are regarded as key components of performance in all jobs.

### **2.13 Conceptual model**

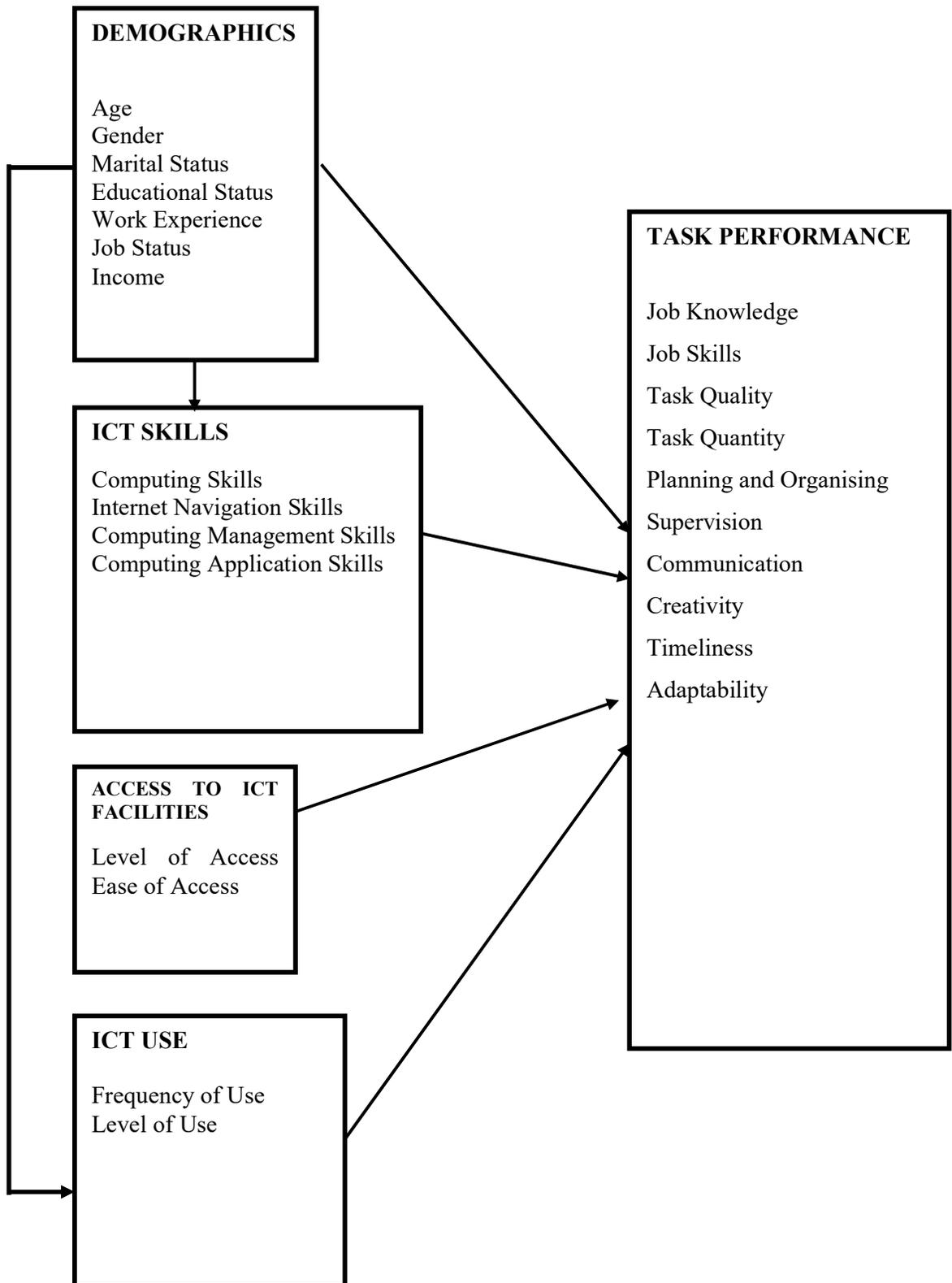
In the process of carrying out this study, a conceptual model which illustrates the interconnected nature of the variables used for this study was designed. The model has four independent variables: demographics, ICT skills, access to ICT, and use of ICT – all of which have direct relationship with the dependent variable: task performance among library personnel. Illustration shows four distinct relationships among the independent and the dependent variables. While library personnel demographics could affect ICT use by directly, demographic variables could also affect the acquisition of ICT skills and its use. (see figure 2.1).

The library personnel are the intermediary between technology and library users. For effective task performance within the university library, personnel's demographics play crucial roles because of their capacity to determine the disposition of personnel to their duties and responsibilities. In order to carry out their responsibilities adequately and impact on the goals of university libraries, the personal characteristics of the library personnel must be positively leveraged both personally and by library management.

The physical and the technological environments in the library are crucial in setting the tone and the pace of work within any library. A non-conducive work environment is that which lacks appropriate facilities, as well as human resources that could bring about the best outcome for such a library. The provision of an enabling environment to thrive and bring forth the desired outcome is of utmost importance to the success of the library. Therefore, possession of adequate ICT skills such as computing skills, Internet navigation skills, computing management skills,

computing application skills and trouble-shooting skills by library personnel would enable the achievement of effective and efficient task performance by library personnel.

Provision of access to ICT would enable library personnel enjoy ease of access to ICT facilities in the library which will in turn promote the frequency with which ICT is used in task performance. Access to ICT would facilitate ICT use, and frequent use of ICT in the library will enhance task performance of library personnel. In view of the above, demographic factors of individual personnel as well as their ICT skills, access and use are crucial to effective task performance. They directly have relationship with the task performance of library personnel, (see Fig. 2).



**Fig. 2.1: Conceptual model of task performance of library personnel designed by the researcher**

**2.14 Appraisal of the literature reviewed**

Literature was reviewed on demographic factors, ICT skills, access and use. The review of literature indicated that effective and efficient task performance is an important criterion for achieving library goals and objectives. Literature has equally revealed that adequacy of job knowledge, the possession of relevant ICT skills, good supervision, and good managerial skills are important to task performance in the library. However, literature search on task performance of library personnel indicated that there has not been much research conducted in this area. The available literature on task performance of personnel is anecdotal in nature, that is, they are mostly theoretical, which implies that there were few empirical studies in this area. In addition, most studies in the field focused on job satisfaction, work motivation and job performance of university library personnel without paying much attention to their demographics, ICT skills, ICT access and ICT use as they relate to task performance.

The review of literature revealed that demographics of individual personnel play crucial roles in task performance in any organisation setting, most especially in the library sector. Literature reviewed equally revealed that demographics, ICT skills and ICT use play crucial roles in task performance of library personnel. Efficient and effective task performance by library personnel requires the use of ICT as an enabling instrument that enhances performance. Gaps existed in literature on demographics and ICT skills possessed by library personnel, as well as demographics and ICT use by library personnel. Most of these scanty literatures available are not relationship-based, which is an indication of gaps in knowledge.

Access to ICT was equally found to be crucial for ICT use in task performance. Provision of access was seen as stimulant for ICT use in practice but literature is very scanty on this. Even though there has been studies in the area of acquisition of ICT skills by library personnel, ICT use and job performance of librarians in research and university libraries, however, very few studies have directly addressed the joint contributions of ICT skills, access and use on task performance of library personnel in university libraries in southwestern Nigeria. From the review of literature on task performance of library personnel, it has been discovered that few literatures have addressed the construct of task performance relationship with other variables addressed in this study. Therefore, this study is an attempt to fill these identified gaps in research.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the methodology adopted for the study with relevance to research design, population of the study, sampling technique and sample size, data collection instrument, validity and reliability, data collection procedure, and methods of data analysis.

#### **3.2 Research Design**

This study adopted the survey research design of the correlational type. This research design was chosen because the researcher is interested in finding the relationship between independent and dependent variables, the joint and relative contribution of demographics (gender, age, marital status, job status, educational status, work experience and level of income), ICT skills, its access, and usage affects task performance. This study is also interested in determining the joint and relative contributions of demographics, ICT skills, access and use to task performance.

#### **3.3. Population of the Study**

There were 14 public university libraries in southwestern Nigeria, comprising 6 federal university libraries and 8 state university libraries. The study purposely selected 13 public universities in southwestern Nigeria that were in session during the time of data gathering. The study involved 330 library personnel from 13 public universities comprising 211 librarians and 119 library officers. Library attendants were excluded from the study because they are not involved in core functions within the library. Public university libraries are those that serve universities established through legislation. They are controlled through the governing council nominated by the visitor: that is, the president/governor. The government is responsible for their financial requests, budgetary proposals and allocation of funds. Their programmes are equally regulated by a governing body selected by the visitor. Public universities are the most accessible to the generality of the people in terms of cost.

**Table 3.1: Population of library personnel in public universities**

Universities	Librarians	Library Officers	Total
Adekunle Ajasin University, Akungba-Akoko	08	04	12
Ekiti State University, Ado-Ekiti	27	09	36
Federal University of Agriculture, Abeokuta	25	05	30
Federal University of Technology, Akure	14	12	26
Federal University of Technology, Oye-Ekiti	06	04	10
Ladoke Akintola University of Technology, Ogbomoso	13	07	20
Lagos State University, Ojoo	14	10	24
Obafemi Awolowo University, Ile-Ife	25	10	35
Olabisi Onabanjo University, Ago-Iwoye	12	14	26
Osun State University, Osogbo	10	07	17
Ondo State University of Science and Technology, Okitipupa	03	01	04
Tai Solarin University of Education, Ijebu-Ode	09	05	14
University of Ibadan	31	19	50
University of Lagos	14	12	26
<b>Total</b>	<b>211</b>	<b>119</b>	<b>330</b>

\*Source : University website calendar, ndar, NU C Website bsite e

2016, and personnel contact.

### 3.4 Sample Size and Sampling Technique

The sampling technique used in this study is total enumeration method. The sample size was 330 library personnel made up of 211 librarians and 119 library officers in the public university libraries in the southwestern Nigeria. This was due to small population size and what research budget could accommodate.

### 3.5 Research Instrument

The instrument used for the collection of data for this study was the questionnaire which was in two forms, namely:

- i. Library personnel task performance questionnaire (LPTPQ). This was responded to by the library personnel.

ii. Supervisors' ratings of library personnel task performance questionnaire (SRLPTPQ). This was responded to by supervisors and heads of unit.

Library personnel task performance questionnaire (LPTPQ). It was divided into five sections:

**Section A.** Demographic

**Section B.** ICT skills

**Section C.** Access to ICT

**Section D.** Use of ICT

**Section E.** Task performance self-rating scale

**Section A.** This section contains the demographics of library personnel. It comprised eleven items. These are age, gender, marital status, educational status and work experience, job status and income, in addition to departments in the library.

**Section B.** This covers the ICT skills of library personnel. This questionnaire on ICT skills was compiled through review of literature on ICT skills and competence requirement of library personnel. This was further modified to suite the work. This section consists of 24 items. The response format was: Very High (VH) = 5, High (H) = 4, Moderately High (MH) =3, Low (L) = 2, Very Low (VL) =1.

**Section C.** This section covers items on access to ICT facilities in the library. It contains 16 items. Examples include computer, Internet, scanner, printer, mobile phone, and so on. The response formats and scoring were: Very Easily Accessible (VA) = 4, Easily Accessible (EA) = 3, Occasionally Accessible (OA) = 2 and Not accessible (NT) = 1.

**Section D.** This section contains items on frequency of ICT use. The questionnaire contains 16 items. Typical examples include computer, Internet, and printer. It consists of 16 items. The response format used was: Daily=6; Weekly=5, Twice a week=4, Once a month=3, Occasionally=2, Not used at all=1.

**Section E.** This consists of Library Personnel Task Performance Self ratings scale. The questionnaire tagged (LPTPSES) was meant for self-rating of library personnel, and it consists of 50 items. It attempts to evaluate task performance traits of public university library personnel using some indicators such as task knowledge, task skills, task quality and others. The items were adapted from Koopmans et al. (2011) and Maripas, Ombra, and Osman (2013). The modification was done by building the sub items in the instrument as well as the measures. The response

formats and scoring were: Very High (VH)= 5, High (H)=4, Moderate = 3, Low(L) = 2,Very Low(VL) = 1.

### **Supervisors' Ratings of Library Personnel Task Performance Questionnaire**

**(SRLPTPQ):**The same instrument used to measure self ratings of library personnel was replicated for supervisors' ratings of library personnel and tagged (SRLPTPQ.)The instrument was meant for supervisors to rate the subordinates being supervised by them as well as the head of each unit in respect of each subordinate working under him or her. The university librarian or his designate rated the task performance of heads of units. The response and scoring formats are: Very High (VH) = 5, High (H) = 4, Moderate (M)= 3, Low (L)= 2, Very Low (VL)= 1. The rating scale adopted for this study was 180-degree scale of measurement, which means the summation of the supervisor's and self-rating scale divided by two. This would ensure objectivity in the performance ratings.

### **3.6 Validity and reliability of the instrument**

The questionnaire designed was examined by supervisor and other five research experts in the Faculty of Education at Olabisi Onabanjo University, Ago-Iwoye, including ICT experts at Olabisi Onabanjo University Library to determine its face and content validity. Suggestions for corrections were made on items and advice given on how to go about the analysis of the data for efficient result. The corrections were effected before the questionnaire was pretested at the selected university libraries.

The questionnaire was pretested by administering thirty copies of it in three university libraries, namely University of Ilorin Library-13, Kwara State University Library-7, Federal University Lokoja-10 and this was done to determine also its content validity and reliability. These university libraries were selected outside study sample. The data collected were subjected to Cronbach Alpha method to ascertain its reliability. This was done by calculating internal consistency and reliability coefficient values for each section. The reliability for sub scale B- ICT literacy skills is  $r = 0.96$ ; sub scale C-access to ICT is  $r = 0.91$ ; sub scale D - ICT usage is  $r = 0.88$  and sub scale E = Self and Supervisors' rating of library personnel is  $r = 0.97$ . The reliability value of 0.70 is an indicator that measuring instrument is valid for data collection.

### **3.7 Data collection procedure**

The researcher with four research assistants and some contact librarians were involved in the collection of the data from the public university libraries. The researcher and the research

assistants worked with supervisors to distribute the questionnaire. Each respondent filled the Library Personnel Task Performance Self Evaluation Scale while Supervisors' Ratings of Library Personnel Task Performance Questionnaire was filled by supervisors or head of unit. This questionnaire for library personnel was coded alongside with supervisors' copy for easy identification and merging later. Respondents were encouraged to return the filled questionnaire directly to their heads of unit. In order to arrive at summation of task performance, the scores of the two assessment scales were added together and divided by two.

### **3.8 Method of data analysis**

The data collated was analysed using descriptive statistical tools such as frequency, mean and standard deviation to describe research questions 1-6. Inferential statistics such as the Pearson Product Moment Correlation was used to analyse the data for research question 7 and to test hypotheses 1-4, while Multiple Regression was used for research question 8 and hypothesis 5. The analysis of the collated data done with aid of Statistical Package for the Social Sciences (SPSS).

### **3.9 Ethical consideration**

This study observed ethical practice that is meant to regulate the research of this nature. Letters of introduction were obtained from the Department of Library Archival and Information Studies, University of Ibadan for head of libraries of participating universities to solicit for and obtain their permission to conduct the research using their libraries. The consent of the respondents was equally sought, by creating the awareness that the study was only for academic purpose devoid of any hidden agenda and their confidentiality was guaranteed. All scholarly works and data consulted in any form or format received due acknowledgement. The study was not foisted on the respondents. This means the respondents had the choice to fill or not to fill the questionnaire. Also the research project was subjected to plagiarism software to ascertain its originality. (See Appendix III)

**CHAPTER FOUR**  
**RESULTS AND DISCUSSION**

**4.1 Introduction**

This chapter presents the result of the study in five segments, namely:

- i. questionnaire response rate,
- ii. demographics of respondents,
- iii. research questions,
- iv. hypotheses and
- v. discussion of findings.

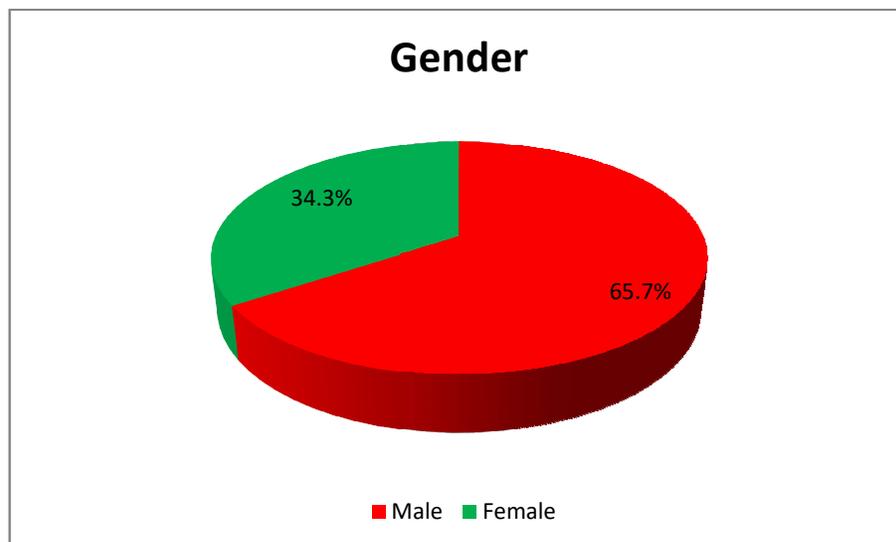
4.2 This section presents questionnaire distribution and response rate.

**Table 4.1: Questionnaire distribution and response rate**

<b>Name of University</b>	<b>No of Questionnaire Distributed</b>	<b>No of Questionnaire Retrieved</b>	<b>% Retrieved of Questionnaire</b>
Adekunle Ajasin University, Akungba- Akoko	12	08	66.7
Ekiti State University, Ado Ekiti.	36	32	88.9
Federal University of Agriculture, Abeokuta	30	19	63.3
Federal University of Technology, Akure	26	13	50
Federal University of Technology, Oye Ekiti.	10	08	80
Ladoke Akintola University of Technology, Ogbomoso.	20	19	95
Lagos State University, Ojoo	26	16	61.5
Obafemi Awolowo University, Ile Ife.	32	30	93.8
Olabisi Onabanjo University, Ago Iwoye.	24	21	87.5
Osun State University, Osogbo	17	15	88
Tai Solarin University, Ijebu Ode	14	08	57.7
University of Ibadan	50	44	88
University of Lagos	26	15	57.6
<b>Total</b>	<b>323</b>	<b>248</b>	<b>76.6</b>

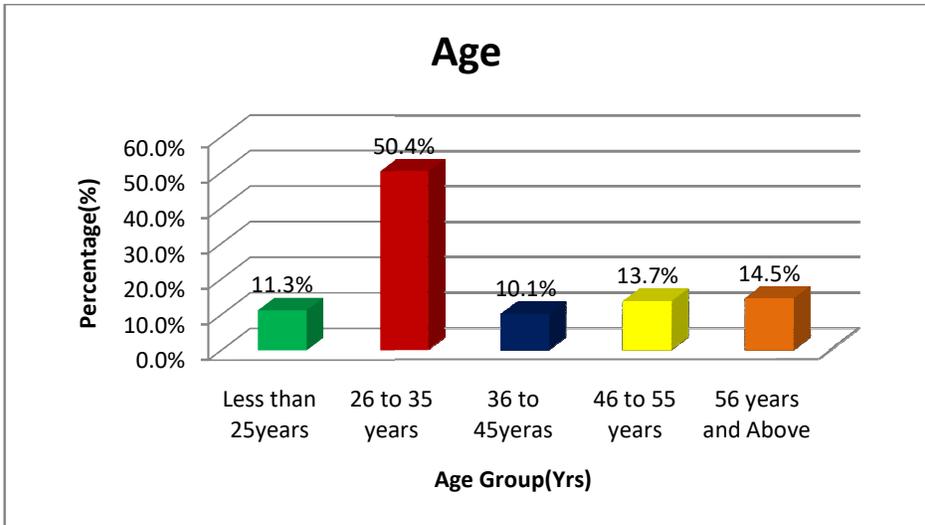
Table 4.1 shows that 323 copies of the questionnaire were distributed to respondents in thirteen university libraries out of which 248 were retrieved and found useful for analysis, giving a response rate of 76.6% as shown in Table 4.1. Ladoke Akintola University Library had the highest response rate; 20 copies were distributed and 19 copies were retrieved, thus having a response rate of 95%. This was followed by OAU, where 32 copies were distributed and 30 copies were retrieved, with a response rate of 93.7%. Federal University of Technology, Akure has the lowest response rate of 26(50%). In the process of administering the questionnaire, it was discovered that Ondo State University was not in session due to some underlying problems. This explained the exclusion of the university from the population investigated.

**4.3** This section presents the demographics (age, gender, marital status, educational status, work experience, job status, income and departments in the library) of library personnel.



**Fig. 4.1: Distribution of respondents by gender**

Figure 4.1 presents the categorisation of respondents by their gender. According to the result analysed, 163(65.7%) of the respondents are male while 85(34.3%) are female. This shows that majority of the respondents are male. This is quite unusual in the profession where females used to be dominant. This indicates that recruitment policies in public university libraries favoured male than the female.



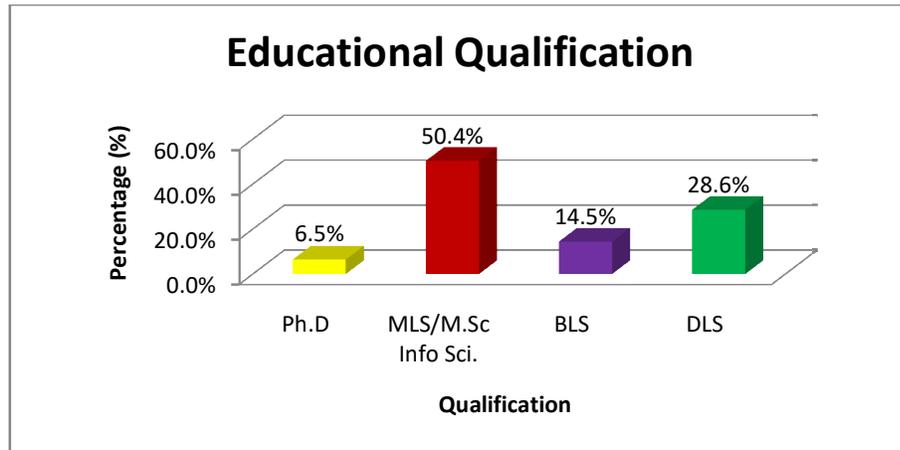
**Fig. 4.2: Distribution of respondents by age group**

Figure 4.2 shows that respondents aged between 26-35 years were in the majority while those within the age bracket of 36-45 years 25(10.1%) were the lowest. This shows that young adults were in the majority, which may have implication on their use of ICT for task performance.



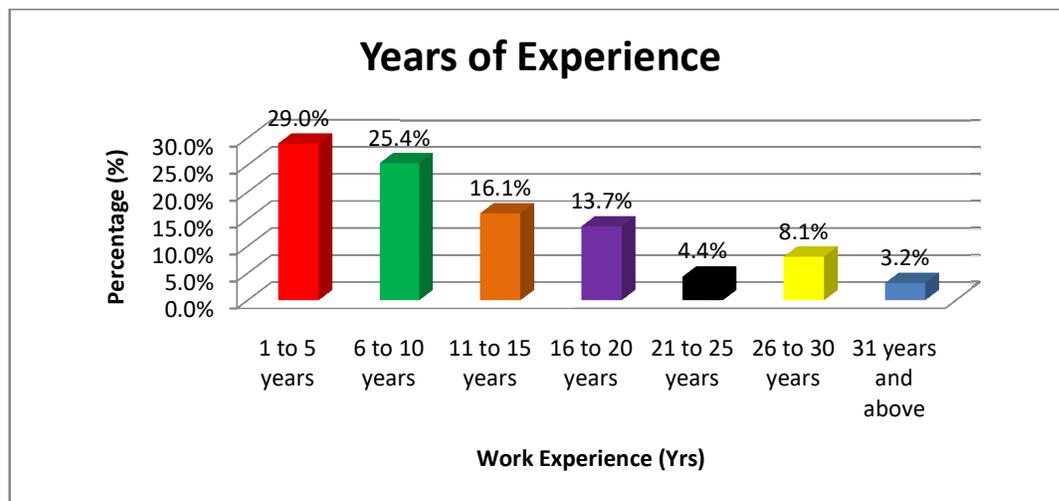
**Fig. 4.3: Marital Status of respondents**

Figure 4.3 reveals that 166(66.9%) of the respondents were married while 82(33.1%) were single. Inference from the figure shows that majority of the respondents are married indicating their state as very responsible.



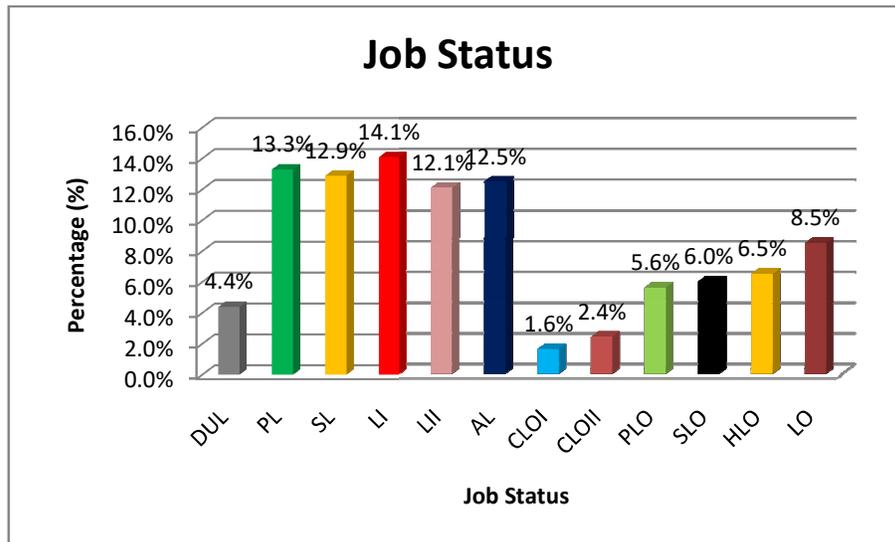
**Fig. 4.4: Educational qualification of respondents**

Figure 4.5 shows that respondents with MLS degree are 125(50.4%); while those with Ph.D 16(6.5%) degree were the lowest. Findings further reveal that majority of the respondents had Masters in Library Studies or its equivalents, which equally reflected in the possession of domain knowledge by library personnel. The implication of this is that more Ph.D holders should be attracted to work in the public university libraries.



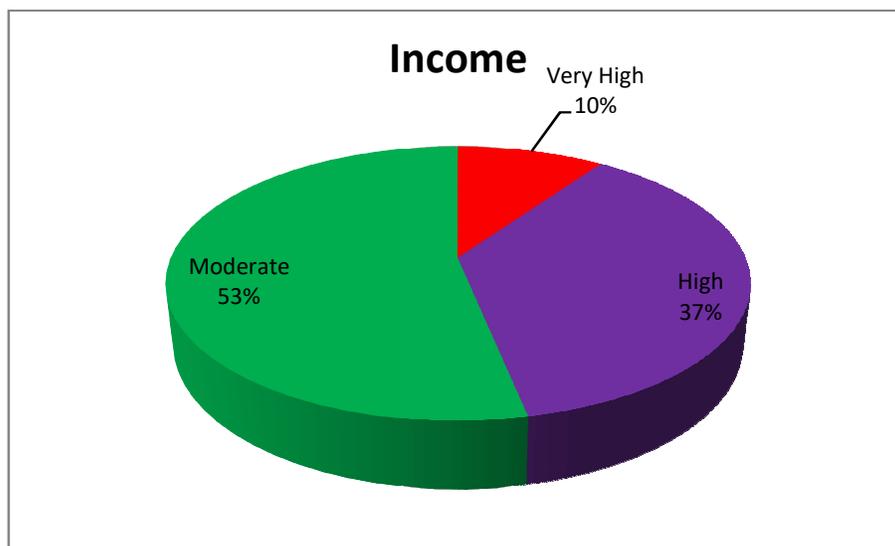
**Fig. 4.5: Distribution of respondents by work experience**

On work experience, figure 4.5 reveals that respondents with 1-5 years of experience are the highest 72(29.0%) while those with 31 years and above 8(3.2%) are the least. Inference from the results showed that majority of the respondents had between 1 and 5 years of experience which implied that respondents have many years to spend in the library which can still impact positively on their task performance.



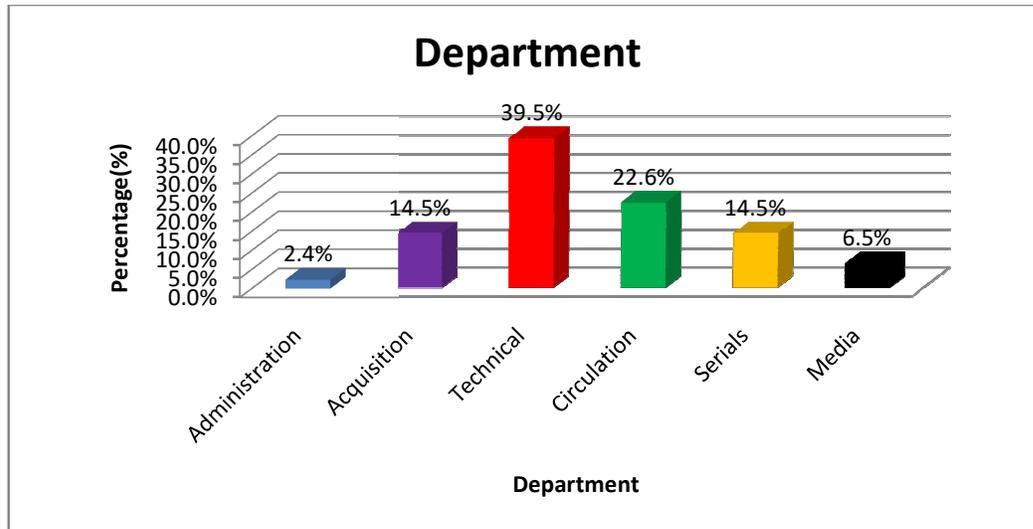
**Fig. 4.6: Job status of respondents**

Figure 4.6 indicates that respondents in Librarian 1 cadre are the majority with 35(14.1%), while the least are those in Deputy University Librarians cadre. 11(4.4%); which implied that majority of those sampled are in their active working stage.



**Fig. 4.7: Distribution of respondents by income**

Figure 4.7 reveals that 132(53.2%) respondents received moderate income, 92(37.1%) respondents obtain high income; while the least 24(9.7%) receives very high income. The implication of this finding is that majority received moderate income, which had implication on how they performed their assigned tasks.



**Fig.4.8: Distribution of respondents by departments in the Library**

Figure 4.8 shows that 98(39.5%) of the respondents work in the technical section; while the least 6(2.4%) work in the administration section of the libraries. This implied that majority of the respondents work in the core area of Librarianship.

#### 4.4 Analysis of research questions

This subsection provides answers to the research questions.

#### Research Question 1: What are the ICT skills of library personnel in public university libraries in southwestern Nigeria?

**Table 4.2a: Level of ICT skills of library personnel in public universities**

S/N	ICT Skills	VH	H	M	L	V.L	Mean	S.D.
<b>Computing Skills</b>								
1.	Word Processing	66	26	50	22	13	3.73	1.11
		26.6%	10.5%	20.2%	8.9%	5.2%		
2.	Printing, editing	46	15	82	26	14	3.48	1.08
		18.5%	6.0%	33.1%	10.5%	5.6%		
3.	Scanning and Uploading	59	27	76	26	19	3.49	1.18
		23.8%	10.9%	30.6%	10.5%	7.7%		
4.	Ability to download and save	88	22	52	15	13	3.87	1.12
		35.5%	8.9%	21.0%	6.0%	5.2%		
5.	PowerPoint presentation skills	62	61	84	27	14	3.52	1.15
		25.0%	24.6%	33.9%	10.9%	5.6%		
6.	Formatting and document processing skills	74	78	62	22	12	3.73	1.13
		29.8%	31.5%	25.0%	8.9%	4.8%		
	Weighted Mean 3.63							
<b>Internet Navigation Skills</b>								
7.	Browsing and navigating the Internet	93	70	57	15	13	3.87	1.14
		37.5%	28.2%	23.0%	6.0%	5.2%		
9.	Ability to use different online search engine	42	76	70	35	25	3.30	1.20
		16.9%	30.6%	28.2%	14.1%	10.1%		
	Information sources evaluation skills	98	76	47	13	14	3.93	1.14
		39.5%	30.6%	19.0%	5.2%	5.6%		
10.	Web creation skills	28	70	42	40	28	3.12	1.16
		11.3%	28.2%	33.1%	16.1%	11.3%		
11.	Ability to partake in online discussion	52	94	61	211	20	3.55	1.15
		21.0%	37.9%	24.6%	8.5%	8.1%		
	Weighted Mean 3.55							
<b>Computing Management Skills</b>								
12.	Trouble-shooting skill	46	87	49	38	28	3.34	1.26
		18.5%	35.1%	19.8%	15.3%	11.3%		
13.	Database creation and management skills	23	57	85	48	35	2.94	1.17
		9.3%	23.0%	34.3%	19.4%	14.1%		
14.	Ability to install and activate anti-virus	48	84	56	37	23	3.39	1.22
		19.4%	33.9%	22.6%	14.9%	9.3%		
15.	E-mail management skills	53	103	50	23	19	3.60	1.15
		21.3%	41.5%	20.2%	9.3%	7.7%		
16.	Managerial skills	43	75	73	36	21	3.33	1.17
		17.3%	30.2%	29.4%	14.5%	8.5%		
17.	Ability to use LCOC	56	90	61	15	26	3.54	1.21
		22.6%	36.3%	24.6%	6.0%	10.5%		
	Weighted Mean 3.35							
<b>Computing Application Skills</b>								
18.	Information storage and preservation skills	48	80	69	30	21	3.42	1.18
		19.4%	32.3%	27.8%	12.1%	8.5%		
19.	Bar-coding skills	50	81	67	27	23	3.44	1.20
		20.2%	32.7%	27.0%	10.9%	9.3%		
20.	Virtual learning skills	46	99	65	18	20	3.54	1.12
		18.5%	39.9%	26.2%	7.3%	8.1%		
21.	Ability to use OPAC for retrieval	93	90	33	16	16	3.92	1.16
		37.5%	36.3%	13.3%	6.5%	6.5%		
22.	Ability to use web 2.0 in library services	88	88	60	49	25	3.17	1.16
		35.5%	35.5%	24.2%	19.8%	10.1%		
23.	Digitisation skills: Information capturing, classification	9	177	46	11	5	3.70	0.70
		3.6%	71.4%	18.5%	4.4%	2.0%		
24.	Library automation	59	103	52	19	15	3.69	1.10
		23.8%	41.5%	21.0%	7.7%	6.0%		
	Weighted Mean 3.55							

**Weighted Mean 3.52; Overall mean 80.91 and SD 19.60**

**\*\*VH=Very High; H=High; M=Moderate; L=Low and VL=Very low**

Table 4.2a presents the state of ICT of skills of respondents using frequency, percentages, mean score and standard deviation. On computing skills, ability to download and save had the highest mean score ratings of 3.87. This is followed by formatting and document processing skills as well as word processing skills with a mean score of 3.73, respectively. Power point presentation skill has a mean score of 3.52; while possession of scanning and updating skills had the lowest mean score of 3.49. Skill in information sources evaluation has the highest mean score rating of (3.9) followed by skill in browsing and navigating the Internet with a mean score of (3.87). Skill in online discussion has a mean score of (3.55). Skill in the use of different search engines has a mean score of (3.30) while web creation skill has the lowest mean score of 3.12. E-mail management skill has a mean score of (3.60) followed by skill in using Library of Congress Online Catalog (LCOC) with a mean score of (3.54); ability to install and activate anti-virus has a mean score of 3.39; managerial skill has a mean score of (3.33) while data creation and management skills has the lowest mean score of (2.94).

Ability to use the OPAC for information retrieval, has the highest mean score rating of (3.92) This is followed by digitization skills, with a with a mean score rating of (3.70) library automation skills, equally has a mean score rating of (3.69), virtual learning skill has a mean score rating of (3.54); Bar-coding skills has a mean score of (3.44), information storage and preservation skills has the lowest mean score of (3.17). Inferences from the above showed that the mean score for printing and editing, scanning and uploading, use of different search engines, trouble shooting, ability to activate anti-virus, web creation skill, database creation and management skills, information storage and preservation skill falls below the weighted mean score of (3.52). The implication of this is that respondents should increase their skills in these areas to enable them handled ICT in the library competently.

**Table 4.2b: Test of norm indicating level of ICT skills of library personnel**

<b>Interval</b>	<b>Total Mean Score (ICT skills)</b>	<b>Remark</b>
1 – 41		
41 – 80		
80- 120	80.91	High

Table 4.2 presents the calculated of test of norms. The maximum ICT skills score of the respondent is  $5 \times 24 = 120$ . This is divided by 3 to arrive at intervals of 40. Therefore, a score of 1-40 indicates low ICT skill; 41-80 indicates moderate ICT skills, while 81-120 indicates high ICT

skills. Since the overall mean score of ICT skills is ( $\bar{x}$  = 80.91) and SD 19.60, this is used to identify the placement within the intervals that best fits. The mean 80.91 falls within the interval of 81 and 120, which implies that the level of IT skills of the respondents is high. The reasons being that majority of the respondents claimed that they possessed word processing skill, ability to download and save, formatting and document processing skill, information evaluation skill, email management skill ability to use OPAC for retrievals, digitisation skill and library automation skill.

**Research Question 2: What is the level of access to ICT facilities for library personnel?**

**Table 4.3a: Level of Access to ICT facilities for library personnel**

S/N	ITEMS	VEA	EA	OA	NA	Mean	SD
1	Personal Computer/Desktop/Laptop	186 75.0%	46 18.5%	11 4.4%	5 2.0%	3.67	.66
2	Printer	130 52.4%	73 29.4%	32 12.9%	13 5.2%	3.29	.88
3	CD/DVD	118 47.6%	76 30.6%	25 10.1%	29 11.7%	3.14	1.01
4	Internet	123 49.6%	65 26.2%	24 9.7%	36 14.5%	3.11	1.08
5	Telephone/Ipad(Smartphones)	117 47.2%	73 29.4%	24 9.7%	34 13.7%	3.10	1.05
6	Photocopier	106 42.7%	68 27.4%	42 16.9%	32 12.9%	3.00	1.06
7	Scanner	99 39.9%	56 22.6%	51 20.6%	42 16.9%	2.85	1.13
8	Television	80 32.3%	53 21.4%	52 21.0%	63 25.4%	2.60	1.18
9	Multimedia Projector	68 27.4%	55 22.2%	62 25.0%	63 25.4%	2.52	1.15
10	Digital Camera	53 21.4%	73 29.4%	54 21.8%	68 27.4%	2.45	1.11
11	Barcode Reader	52 21.0%	62 25.0%	51 20.6%	83 33.5%	2.33	1.15
12	Interactive White Board	49 19.8%	61 24.6%	59 23.8%	79 31.9%	2.32	1.12
13	Barcode Scanner	55 22.2%	54 21.8%	53 21.4%	86 34.7%	2.31	1.17
14	CCTV	55 22.2%	51 20.6%	49 19.8%	93 37.5%	2.27	1.18
15	Video Conferencing	46 18.5%	58 23.4%	45 18.1%	99 39.9%	2.21	1.16
16	Fax Machine	46 18.5%	35 14.1%	50 20.2%	117 47.2%	2.04	1.17

Weighted Mean 2.69; Overall mean 43.58 SD 12.17

\*\*VEA= Very easily accessible; EA=Easily accessible; OA= Occasionally accessible NA=Not accessible

Table 4.3 presents the responses on ICT access to library personnel in public university libraries insouthwestern Nigeria. Based on the items on the table, the results show that access to

computer desktop/laptop has a mean score of (3.67) followed by printer with a mean of (2.29). While CD/DVD has a mean score of (3.14), the Internet has a mean of (3.11). Telephone/ipad/smartphone has a mean of (3.10), photocopier 3.00 while scanner has a mean of (2.85).

Multimedia projector has a mean score of (2.52), that of digital camera is (2.45), barcode reader (2.33), Interactive whiteboard (2.32), barcode scanner (2.31), CCTV (2.27), video conferencing (2.21), fax machine (2.04), mean score are below the weighted mean score of (2.69). Inference from the table showed that the computer desktop/laptop has the highest mean score while fax machine has the lowest mean score.

The overall mean is 43.58 SD 12.17 while the weighted mean score is (2.69). Of all the ICT facilities accessible to library personnel in university library, computer desktop/laptop is the most accessible while fax machine is the least accessible. The implication of the findings is that all ICT facilities with mean score below the weighted mean score of (2.69) must be made accessible and useful for library personnel to enhance their performance on the job.

**Table 4.3b: Test norm indicating level of access to ICT for the library personnel**

Interval	Total Mean Score (ICT access)	Remark
1-22		
23-43		
44-64	43.58 (approximately 44.00)	High

Table 4.3b presents the calculated of test of norms Test of access to ICT. The maximum score of respondents' level of access to ICT is 64. This is divided by 3 to get approximate interval of 21. A score of 1-21 indicates low access to ICT; 22-43 indicates moderate access; while 44-64 shows high access. The overall mean score of access to ICT of the respondents is  $\bar{x}=43.58$  SD 12.17, which is approximately 44.00. When this is placed within the intervals the result shows that the mean score falls within the range of 44-64, which indicates that the respondents have high access to ICT facilities.

### Research Question 3a: What is the frequency of ICT use by library personnel?

**Table 4.4a: Frequency of ICT use by the library personnel in public universities**

S/N	Type of ICT	Daily	Weekly	Twice a week	Once a month	Not at all	Mean	S.D.
1	Computer Desktop/Laptop/ Tablet	214 86.3%	17 6.9%	4 1.6%	6 2.4%	7 2.8%	4.71	1.85
2	Internet	168 67.7%	28 11.3%	9 3.6%	7 2.8%	36 14.5%	4.15	1.46
3	Telephone/iPad phones/Smartphones	153 61.7%	33 13.3%	12 4.8%	10 4.0%	40 16.1%	4.00	1.51
4	Printer	121 48.8%	68 27.4%	10 4.0%	24 9.7%	25 10.1%	3.95	1.35
5	Photocopier	114 46.0%	47 19.0%	14 5.6%	32 12.9%	41 16.5%	3.65	1.55
6	CD/DVD	96 38.7%	45 18.1%	18 7.3%	24 9.7%	65 26.2%	3.33	1.67
7	Television	89 35.9%	33 13.3%	4 1.6%	37 14.9%	85 34.3%	3.02	1.76
8	Scanner	48 19.4%	57 23.0%	23 9.3%	46 18.5%	74 29.8%	2.83	1.54
9	Digital camera	58 23.4%	30 12.1%	13 5.2%	40 16.1%	107 43.1%	2.56	1.66
10	Multimedia Projector/Projection Screen	47 19.0%	20 8.1%	20 8.1%	49 19.8%	112 45.2%	2.36	1.56
11	Interactive White Board	41 16.5%	27 10.9%	24 9.7%	45 18.1%	111 44.8%	2.36	1.53
12	Videoconferencing	26 10.5%	26 10.5%	16 6.5%	38 15.3%	124 50.00%	2.31	1.58
13	Barcode Reader	41 16.5%	27 10.9%	24 9.7%	25 10.1%	131 52.8%	2.28	1.57
14	CCTV	43 17.3%	33 13.3%	7 2.8%	28 11.3%	137 55.2%	2.26	1.62
15	Barcode Scanner	29 11.7%	29 11.7%	21 8.5%	35 14.1%	134 54.0%	2.13	1.46
16	Fax machine	33 13.3%	23 9.3%	19 7.7%	21 8.5%	152 61.3%	2.05	1.50

**Weighted Mean 2.99; Overall mean 47.97**

Table 4.4a presents responses on frequency of ICT use by library personnel. The results reveal that 214 (86.3%) respondents use computer desktop/laptop/tablet daily; 17(6.9%) use it weekly; 4(1.6%) use it twice a week; 6(2.4%) use it monthly; while 7(2.8%) do not use it at all with a mean of 4.71. Furthermore, the table shows that 168(67.7%) use the Internet daily; 28(11.3%) use it weekly; 9(3.6%) use it twice a week, 7(2.8%) use it monthly while 36 (14.5%) did not use it at all with a mean of 4.15. Also, 153(61.7%) use Telephone/iPad phones/Smartphones daily; 33(13.3%) use it weekly; 12(4.8%) use it twice a week; 10 (4.0%) use it once a month; while 40(16.1%) do not use it all with a mean of 4.00.

The analysis reveals further that 134(54.0%) respondents do not use barcode scanner, 35(14.1%) use it monthly; 29(11.7%) use daily; 29(11.7%) use it weekly; and 21(8.5%) use it twice

a month, with a mean of 2.13. On fax machine, 152(61.3%) do not use it at all; 33(13.3%) respondents use it daily; 23(9.3%) weekly; 21(8.5%) used it monthly; and 19(7.7%) twice a week, with a mean of 2.05. Inference from the table above indicates that computer ranked highest with a mean of (4.71) and is followed by the Internet which has(4.15). The result indicates that the ICT facility mostly used by library personnel to perform daily tasks are the computer, the Internet and telephone/ipad/smartphone, while barcode scanner and fax machine are hardly used in the university libraries. Computers/laptops and the Internet are regarded as very important tools that could enhance performances of library personnel on the job. The overall mean is (47.97) while the weighted mean is 2.99.

**Table 4.4b: Test norm indicating level of ICT use by the library personnel**

Intervals	Total Mean Score (ICT Use)	Remark
1-26		
27-52	47.97	Moderate
53-80		

Table 4.4b presents the calculated test of norms for ICT use of respondents. The maximum ICT use score of the respondent is  $5 \times 16 = 80$ . To arrive at the intervals, 80 is divided by 3 which gives us 26. A score of 1-26 indicates low ICT use; 27-52 indicates moderate use; and 53-80 indicates high use. Since the overall mean of the respondents is  $\bar{x} = 47.97$  which falls within the range of 27-52, it means the ICT use of the respondents was moderate.

**Research Question 4a: What is the level of taskperformance of librarians in public universities in southwestern Nigeria based on self evaluation?**

**Table4.5a: Level of self-evaluation of task performance of the librarians**

S/N	Items	VH	H	MOD	L	VL	Mean	S.D.
<b>Job Knowledge:</b> Ability to								
1.	perform tasks in accordance with laid down principles and procedures	75	52	12		2	4.40	.77
		53.2%	36.9%	8.5%	%	1.4%		
2.	understand the library collections and core system	69	56	14	1	1	4.35	.75
		48.9%	39.7%	9.9%	0.7%	0.7%		
3.	keep knowledge current	69	56	14		2	4.35	.77
		48.9%	39.7%	9.9%	%	0.4%		
4.	demonstrate knowledge and skills needed to perform tasks effectively	73	52	14		2	4.38	.78
		51.8%	36.9%	9.9%	%	1.4%		
5.	demonstrate depth, currency and job knowledge	65	61	9	4	2	4.30	.83
		46.1%	43.3%	6.4%	2.8%	1.4%		
<b>Job Skills:</b> Ability to								
6.	maintain skills in current tools and technologies necessary to complete job tasks	64	65	9	1	2	4.33	.75
		45.4%	46.1%	6.4%	0.7%	1.4%		
7.	demonstrate physical competency skills	69	56	10	3	3	4.31	.86
		48.9%	39.7%	7.1%	2.1%	2.1%		
8.	demonstrate skills relevant to task	66	59	11	2	3	4.30	.84
		46.8%	41.8%	7.8%	1.4%	2.1%		
9.	demonstrate affective skills	65	58	15	1	2	4.30	.80
		46.1%	41.1%	10.6%	0.7%	1.4%		
10.	pay attention to details	61	65	13	1	1	4.30	.73
		43.3%	46.1%	9.2%	0.7%	0.7%		
<b>Task quality:</b> Ability to								
11.	carry out task accurately and neatly	71	56	10	3	1	4.37	.77
		50.4%	39.7%	7.1%	2.1%	0.7%		
12.	multitask in an effective manner	61	69	9		2	4.33	.72
		43.3%	48.9%	6.4%	%	1.4%		
13.	meet standard procedure for executing tasks	63	64	10	2	2	4.30	.78
		44.7%	45.4%	7.1%	1.4%	1.4%		
14.	execute tasks with minimal error\s	60	64	14	1	2	4.27	.78
		42.6%	45.4%	9.9%	0.7%	1.4%		
15.	produce exceptional outputs	55	65	19		2	4.21	.78
		39.0%	46.1%	13.5%	%	1.4%		
<b>Task Quantity:</b> Ability to								
16.	ensure that outputs meet and exceed expectation	68	62	8	2	1	4.38	.72
		48.2%	44.0%	5.7%	1.4%	0.7%		
17.	fulfill assigned responsibilities and duties	69	56	9	6	1	4.32	.83
		48.9%	39.7%	6.4%	4.3%	0.7%		
18.	accomplish acceptable volume of work under normal situation	63	60	16	1	1	4.30	.75
		44.7%	42.6%	11.3%	0.7%	0.7%		
19.	meet stipulated results/outcomes	64	62	9	4	2	4.29	.82
		45.4%	44.0%	6.4%	2.8%	1.4%		
20.	manage quantifiable assignment	61	60	16	2	2	4.25	.82
		43.3%	42.6%	11.3%	1.4%	1.4%		
<b>Planning and Organising:</b> Ability to								
21.	monitor and control resources	60	65	12	1	3	4.26	.82
		42.6%	46.1%	8.5%	0.7%	2.1%		
22.	demonstrate skills in planning, organising and evaluating subordinate staff	57	68	11	4	1	4.25	.78
		40.4%	48.2%	7.8%	2.8%	0.7%		
23.	exhibit strong organisation skills	58	68	9	3	3	4.24	.84
		41.1%	48.2%	6.4%	2.1%	2.1%		
24.	initiate clearer objectives	59	60	15	6	1	4.21	.85
		41.8%	42.6%	10.6%	4.3%	0.7%		
25.	identify resources that will meet organisational goals and objectives	61	60	12	4	4	4.21	.92
		43.3%	42.6%	8.5%	2.8%	2.8%		

\*\*Key: VH=Very High; H=High; M=Moderate; L=Low, VL= Very Low

S/N	Items	VH	H	MOD	L	VL	Mean	S.D.
<b>Supervision: Ability to</b>								
26.	demonstrate quality leadership	68 48.2%	60 42.6%	10 7.1%	1 0.7%	2 1.4%	4.35	.77
27.	identify problems and proffer solution	71 50.4%	55 39.0%	8 5.7%	4 2.8%	3 2.1%	4.33	.87
28.	influence other members of staff positively	65 46.1%	61 43.3%	8 5.7%	4 2.8%	3 2.1%	4.28	.86
29.	harness both human and materials resources to achieve set goals	65 46.1%	59 41.8%	12 8.5%	1 0.7%	4 2.8%	4.28	.87
30.	seek clearance when goals and priorities are unclear	61 43.3%	60 42.6%	12 8.5%	3 2.1%	5 3.5%	4.20	.94
<b>Communication: Ability to</b>								
31.	listen carefully and seek clarification to ensure understanding	64 45.4%	64 45.4%	8 5.7%	1 0.7%	4 2.8%	4.30	.84
32.	effectively communicate information and ideas orally and in writing	60 42.6%	60 42.6%	16 11.3%	1 0.7%	4 2.8%	4.21	.88
33.	share information	52 36.9%	75 53.2%	8 5.7%	2 1.4%	4 2.8%	4.20	.84
34.	communicate effectively	55 39.0%	70 49.6%	8 5.7%	4 2.8%	4 2.8%	4.19	.89
35.	communicate effectively with gesture	62 44.0%	58 41.1%	13 9.2%	2 1.4%	6 4.3%	4.19	.97
<b>Creativity: Ability to</b>								
36.	take realistic decisions	66 46.8%	60 42.6%	9 6.4%	2 1.4%	4 2.8%	4.29	.87
37.	identify and analyse problems	69 48.9%	53 37.6%	13 9.2%	1 0.7%	5 3.5%	4.28	.93
38.	follow up to ensure problems are resolved	62 44.0%	60 42.6%	14 9.9%	2 1.4%	3 2.1%	4.25	.83
39.	take appropriate action to resolve problems	58 41.1%	65 46.1%	14 9.9%	1 0.7%	3 2.1%	4.23	.82
40.	formulate alternative solution	53 37.6%	65 46.1%	17 12.1%	1 0.7%	5 3.5%	4.13	.91
<b>Timeliness: Ability to</b>								
41.	promptly execute tasks	73 51.8%	49 34.8%	13 9.2%	1 0.7%	5 3.5%	4.30	.93
42.	manage time well	72 51.1%	49 34.8%	11 7.8%	4 2.8%	5 3.5%	4.27	.98
43.	consistently carry out assigned task	68 48.2%	54 38.3%	11 7.8%	3 2.1%	5 3.52%	4.26	.95
44.	complete allocated task on schedule	69 48.9%	52 36.9%	11 7.8%	4 2.8%	5 3.5%	4.25	.97
45.	priotise tasks	63 44.7%	60 42.6%	11 7.8%	2 1.4%	5 3.5%	4.23	.92
<b>Adaptability: Ability to</b>								
46.	quickly and proficiently learn new methods	67 47.5%	60 42.6%	7 5.0%	2 1.4%	5 3.5%	4.29	.91
47.	perform tasks demanding physical	63 44.7%	64 45.4%	8 5.7%	1 0.7%	5 3.5%	4.27	.89
48.	adapt to changes in direction and priority	65 46.1%	59 41.8%	11 7.8%	1 0.7%	5 3.5%	4.26	.91
49.	adjust to new work processes	62 44.04%	59 41.8%	13 9.2%	2 1.4%	5 3.5%	4.21	.93
50.	accept new challenges, responsibilities and assignments	51 36.2%	69 48.9%	15 10.6%	2 1.4%	4 2.8%	4.14	.87

\*\*Key: VH=Very High; H=High; M=Moderate; L=Low, VL= Very Low

Table 4.5a present the respondents' self evaluation of librarians' task performance in public university libraries. On job knowledge, ability to perform tasks in accordance with laid

down principles and procedures has the highest mean score rating (4.40), while ability to demonstrate depth, currency and job knowledge has the lowest mean score rating respectively. On job skills, ability to maintain skills in current tools and technologies necessary to complete job tasks ranks highest by the mean score rating (4.33), while ability to pay attention to details has the lowest mean score rating (4.30) respectively.

Based on task quality, ability to carry out tasks accurately and neatly ranks highest by the mean score rating (4.37), while ability to produce exceptionally quality tasks has the lowest mean score rating (4.25). On task quantity, ability to ensure that outputs meet and exceed expectation ranks highest by the mean score ratings (4.38), while ability to manage quantifiable assignment has the lowest mean score (4.21). On planning and organising, ability to monitor and control resources (4.26) ranks highest by the mean score rating, while ability to identify resources that will meet organisational goals and objectives has the lowest mean score (4.21).

On supervision, ability to demonstrate quality leadership ranks highest by the mean score rating (4.35) while ability to seek clearance when goals and priorities are unclear has the lowest mean score (4.20). On communication, ability to listen carefully and seek clarification to ensure understanding ranks highest by the mean score rating (4.30), while ability to communicate effectively with gestures has the lowest mean score (4.19).

On creativity, ability to take realistic decisions ranks highest by the mean score rating (4.29), while ability to formulate alternative solution has the lowest mean score (4.13). On being timely, ability to promptly execute task ranks highest by the mean score rating (4.30), while ability to prioritise tasks has the lowest mean score (4.23). On adaptability, ability to quickly and proficiently learn new methods ranks highest by the mean score rating (4.29), while ability to accept new challenges, responsibilities and assignments has the lowest mean score (4.14).

**Research Question 4b: What is the level task performance of librarians as evaluated by supervisors?**

**Table4.5b: Supervisors' evaluation of librarians' task performance**

S/N	Items	VH	H	MOD	L	VL	Mean	S.D.
<b>Job Knowledge:</b> Ability to								
1.	perform tasks in accordance with laid down principles and procedures	44 31.2%	73 51.8%	20 14.2%	1 0.7%	3 2.1%	4.09	.82
2.	understand the library collections and core system	40 28.4%	68 48.2%	24 17.0%	6 4.3%	3 2.1%	3.96	.91
3.	keep knowledge current	41 29.1%	66 46.8%	22 15.6%	8 5.7%	4 2.8%	3.94	.97
4.	demonstrate knowledge and skills needed to perform tasks effectively	36 25.5%	68 48.2%	27 19.1%	7 5.0%	3 2.1%	3.90	.91
5.	demonstrate depth, currency and job knowledge	37 26.2%	71 50.4%	23 16.3%	6 4.3%	4 2.8%	3.93	.92
<b>Job Skills:</b> Ability to								
6.	demonstrate skills relevant to task	40 28.4%	66 46.8%	30 21.3%	2 1.4%	3 2.1%	3.98	.87
7.	maintain skills in current tools and technologies necessary to complete job tasks	44 31.2%	59 41.8%	27 19.1%	7 5.0%	4 2.8%	3.94	.98
8.	demonstrate physical competency skills	37 26.2%	65 46.1%	32 22.7%	3 2.1%	4 2.85%	3.91	.91
9.	demonstrate affective skills	35 24.8%	67 47.5%	32 22.7%	3 2.1%	4 2.8%	3.89	.90
10.	pay attention to details	37 26.2%	62 44.0%	36 25.5%	2 1.4%	4 2.8%	3.89	.91
<b>Task Quality:</b> Ability to								
11.	multitask in an effective manner	42 29.8%	64 45.4%	29 20.6%	2 1.4%	4 2.8%	3.98	.91
12.	carry out task accurately and neatly	39 27.7%	63 44.7%	33 23.4%	2 1.4%	4 2.8%	3.93	.91
13.	meet standard procedure for executing tasks	42 29.8%	66 46.8%	28 19.9%	2 1.4%	3 2.1%	4.01	.87
14.	produce exceptionally tasks	38 27.0%	70 49.6%	28 19.9%	2 1.4%	3 2.1%	3.98	.85
15.	execute tasks with minimal errors	35 24.8%	70 49.6%	31 22.0%	2 1.4%	3 2.1%	3.94	.85
<b>Task Quantity:</b> Ability to								
16.	accomplish acceptable volume of work under normal situation	38 27.0%	71 50.4%	26 18.4%	3 2.1%	3 2.1%	3.98	.86
17.	manage quantifiable assignment	37 26.2%	67 47.5%	27 19.1%	5 3.5%	5 3.5%	3.89	.95
18.	fulfil assigned responsibilities and duties	36 25.5%	66 46.8%	31 22.0%	4 2.8%	4 2.8%	3.89	.92
19.	meet stipulated results/outcomes	35 24.8%	61 43.3%	36 25.5%	5 3.5%	4 2.8%	3.84	.94
20.	ensure that outputs meet and exceed expectation	26 18.4%	73 51.8%	35 24.8%	1 0.7%	6 4.3%	3.79	.90
<b>Planning and Organising:</b> Ability to								
21.	initiate clearer objectives	39 27.7%	67 47.5%	30 21.3%	2 1.4%	3 2.1%	3.97	.86
22.	exhibit strong organisation skills	41 29.1%	59 41.8%	35 24.8%	3 2.1%	3 2.1%	3.94	.90
23.	demonstrate skills in planning, organising and evaluating subordinate staff	41 29.1%	62 44.0%	28 19.9%	6 4.3%	4 2.8%	3.92	.96
24.	identify resources that will meet organisational, goals and objectives	31 22.0%	73 51.8%	32 22.7%	2 1.4%	3 2.1%	3.90	.83
25.	monitor and control resources	33 23.4%	62 44.0%	40 28.4%	2 1.4%	4 2.8%	3.84	.90

**\*\*Key:** VH=Very High; H=High; M=Moderate; L=Low, VL= Very low

S/N	Items	VH	H	MOD	L	VL	Mean	S.D.
<b>Supervision:</b> Ability to								
26.	harness both human and material resources to achieve set goals	39 27.7%	67 47.5%	31 22.0%	%	4 2.8%	3.97	.87
27.	identify problems and proffer solutions	39 27.7%	68 48.2%	27 19.1%	4 2.8%	3 2.1%	3.96	.88
28.	influence other members of staff positively	3 22.0%	77 54.6%	28 19.9%	1 0.7%	4 2.8%	3.92	.84
29.	seek clearance when goals and priorities are unclear	35 24.8%	65 46.1%	35 24.8%	3 2.2%	3 2.1%	3.89	.88
30.	demonstrate quality leadership	36 25.5%	64 45.4%	34 24.1%	3 2.1%	4 2.8%	3.89	.91
<b>Communication:</b> Ability to								
31.	effectively communicate information and ideas orally and in writing	36 25.5%	70 49.6%	30 21.3%	1 0.7%	4 2.8%	3.94	.87
32.	communicate effectively	41 29.1%	60 42.6%	34 24.1%	3 2.1%	3 2.1%	3.94	.90
33.	share information	38 27.0%	66 46.8%	30 21.3%	3 2.1%	4 2.8%	3.93	.91
34.	communicate effectively with bodily gesture	35 24.8%	64 45.4%	36 25.5%	3 2.1%	3 2.1%	3.89	.88
35.	listen carefully and seek clarification to ensure understanding	31 22.0%	66 46.8%	34 24.1%	4 2.8%	6 4.3%	3.79	.96
<b>Creativity:</b> Ability to								
36.	take realistic decisions	43 30.5%	63 44.7%	26 18.4%	5 3.5%	4 2.8%	3.96	.94
37.	take appropriate action to resolve problems	39 27.7%	70 49.6%	23 16.3%	5 3.5%	4 2.8%	3.96	.92
38.	follow up to ensure problems are resolved	42 29.8%	62 44.0%	28 19.9%	5 3.5%	4 2.8%	3.94	.95
39.	identify and analyse problems	40 28.4%	61 43.3%	33 23.4%	4 2.8%	3 2.1%	3.93	.91
40.	formulate alternative solutions	35 24.8%	69 48.9%	27 19.1%	6 4.3%	4 2.8%	3.89	.93
<b>Timeliness:</b> Ability to								
41.	promptly execute tasks	45 31.9%	64 45.4%	24 17.0%	4 2.8%	4 2.8%	4.01	.93
42.	complete allocated tasks on schedule	41 29.1%	71 50.4%	21 14.9%	5 3.5%	3 2.1%	4.01	.88
43.	manage time well	43 30.5%	65 46.1%	27 19.1%	2 1.4%	4 2.8%	4.00	.90
44.	constituently carry out assigned tasks	41 29.1%	66 46.8%	25 17.7%	5 3.5%	4 2.8%	3.96	.93
45.	prioritise tasks	35 24.8%	73 51.8%	23 16.3%	6 4.3%	4 2.8%	3.91	.91
<b>Adaptability:</b> Ability to								
46.	adjust to new work processes	40 28.4%	68 48.2%	27 19.1%	3 2.1%	3 2.1%	3.99	.87
47.	perform tasks demanding physical	36 25.5%	74 52.5%	25 17.7%	3 2.1%	3 2.1%	3.97	.84
48.	quickly and proficiently learn new methods	34 24.1%	77 54.6%	22 15.6%	4 2.8%	4 2.8%	3.94	.88
49.	adapt to changes in direction and priority	36 25.5%	73 51.8%	23 16.3%	5 3.5%	4 2.8%	3.94	.90
50.	accept new challenges, responsibilities and assignment	44 31.2%	54 38.3%	20 14.2%	12 8.5%	11 7.8%	3.77	1.20

**\*\* Key: VH=Very High; H=High; M=Moderate; L=Low, VL= Very Low**

Table 4.5b present supervisors' evaluation of librarians' task performance in public university libraries insouthwestern Nigeria. On job knowledge, ability to perform tasks in accordance with laid down principles and procedures ranks highest by the mean score rating (4.09), while ability

to demonstrate knowledge and skills needed to perform tasks effectively has the lowest mean score (3.90). On job skills, ability to demonstrate skills relevant to task ranks highest by the mean score rating (3.98), while ability to demonstrate affective skills and ability to pay attention to details has the lowest ratings of mean score (3.89).

Based on task quality, ability to meet standard procedure for executing tasks ranks highest by the mean score rating (4.01), while ability to carry out task accurately and neatly has the lowest mean score (3.93). On task quantity, ability to accomplish acceptable volume of work under normal situation ranks highest by the mean score rating (3.98), while ability to ensure that outputs meet and exceed expectation has the lowest mean score (3.79).

Furthermore, planning and organising, ability to initiate clearer objectives ranks highest by the mean score rating (3.97), while ability to monitor and control resources has the lowest mean score (3.84). On supervision; ability to harness both human and material resources to achieve set goals ranks highest by the mean score rating (3.97), while ability to demonstrate quality leadership has the lowest mean score (3.89). On communication, ability to effectively communicate information and ideas orally and in writing ranks highest by the mean score rating (3.94), while ability to listen carefully and seek clarifications to ensure understanding has the lowest mean score (3.79).

While creativity, ability to take realistic decisions ranks highest by the mean score rating (3.96), the ability to formulate alternative solution has the lowest mean score (3.89). On timeliness, ability to promptly execute tasks and ability to prioritise tasks ranks highest by the mean score ratings (4.01) while ability to prioritise tasks has a mean score (3.91). On adaptability, ability to adjust to new work processes ranks highest by the mean score rating (3.99), while ability to accept new challenges, responsibilities and assignments has the lowest mean score (3.77).

**Research Question 5c: What is the summation of the level of task performance of librarians in public universities?**

**Table4.5c: Overall Summation of level of task performance of the librarians**

S/N	Items	Mean Self Assessment	Mean Supervisors Assessment	Overall Average
	<b>Job Knowledge:</b> Ability to			
1.	perform tasks in accordance with laid down principles and procedures	4.40	4.09	4.25
2.	understand the library collections and core system	4.35	3.96	4.15
3.	keep knowledge current	4.35	3.94	4.14
4.	demonstrate knowledge and skills needed to perform tasks effectively	4.38	3.90	4.14
5.	demonstrate depth, currency and job knowledge	4.30	3.93	4.12
	<b>Job Skills:</b> Ability to			
6.	demonstrate skills relevant to task	4.30	3.98	4.14
7.	maintain skills in current tools and technologies necessary to complete job tasks	4.33	3.94	4.14
8.	demonstrate physical competency skills	4.31	3.91	4.11
9.	demonstrate affective skills	4.30	3.89	4.10
10.	pay attention to details	4.30	3.89	4.10
	<b>Task Quality:</b> Ability to			
11.	multitask in an effective manner	4.33	3.98	4.16
12.	meet standard procedure for executing tasks	4.30	4.01	4.15
13.	carry out task accurately and neatly	4.37	3.93	4.15
14.	produce exceptionally quality tasks	4.21	3.98	4.10
15.	to execute tasks with minimal errors	4.27	3.94	4.10
	<b>Task Quantity:</b> Ability to			
16.	accomplish acceptable volume of work under normal situation	4.30	3.98	4.14
17.	fulfill assigned responsibilities and duties	4.32	3.89	4.11
18.	ensure that outputs meet and exceed expectation	4.38	3.79	4.09
19.	manage quantifiable assignment	4.25	3.89	4.07
20.	meet stipulated results/outcomes	4.29	3.84	4.06
	<b>Planning and Organising:</b> Ability to			
21.	demonstrate skills in planning, organising and evaluating subordinate staff	4.25	3.92	4.09
22.	initiate clearer objectives	4.21	3.97	4.09
23.	exhibit strong organisation skills	4.24	3.94	4.09
24.	identify resources that will meet organisational goals and objectives	4.21	3.90	4.06
25.	monitor and control resources	4.26	3.84	4.05

S/N	Items	Mean Self Assessment	Mean Supervisors Assessment	Overall Average
	<b>Supervision:</b> Ability to			
26.	identify problems and proffer solutions	4.33	3.96	4.14
27.	harness both human and materials resources to achieve set goals	4.28	3.97	4.13
28.	demonstrate quality leadership	4.35	3.89	4.12
29.	influence other members of staff positively	4.28	3.92	4.10
30.	seek clearance when goals and priorities are unclear	4.20	3.89	4.05
	<b>Communication:</b> Ability to			
31.	effectively communicate information and ideas orally and in writing	4.21	3.94	4.08
32.	communicate effectively	4.19	3.94	4.07
33.	share information	4.20	3.93	4.07
34.	listen carefully and seek clarification to ensure understanding	4.30	3.79	4.05
35.	communicate effectively with gesture	4.19	3.89	4.04
	<b>Creativity:</b> Ability to			
36.	take realistic decisions	4.29	3.96	4.13
37.	identify and analyse problems	4.28	3.93	4.11
38.	take appropriate action to resolve problems	4.23	3.96	4.10
39.	follow up to ensure problems are resolved	4.25	3.94	4.10
40.	formulate alternative solution	4.13	3.89	4.01
	<b>Timeliness:</b> Ability to			
41.	promptly execute tasks	4.30	4.01	4.15
42.	manage time well	4.27	4.00	4.14
43.	complete allocated tasks on schedule	4.25	4.01	4.13
44.	consistently carry out assigned tasks	4.26	3.96	4.11
45.	prioritise tasks	4.23	3.91	4.07
	<b>Adaptability:</b> Ability to			
46.	perform tasks demanding physical strength	4.27	3.97	4.12
47.	quickly and proficiently learn new methods	4.29	3.94	4.12
48.	adjust to new work processes	4.21	3.99	4.10
49.	adapt to changes in direction and priority	4.26	3.94	4.10
50.	accept new challenges responsibilities and assignments	4.14	3.77	3.96

**Overall mean 224.73**

Table 4.5c presents the overall summation of task performance among librarians. On job knowledge, ability to perform tasks in accordance with laid down principles and procedures ranks highest by the mean score rating (4.25), while ability to demonstrate depth, currency and job knowledge has the lowest mean score (4.12). On job skill, ability to demonstrate skills relevant to task ranks highest by the mean score rating (4.14), while ability to pay attention to details has the lowest mean score (4.1).

Task quality indicated that the ability to multitask in an effective manner ranks highest by the mean score rating (4.16), while ability to execute tasks without errors has the lowest mean score (4.1) score. On task quantity, ability to accomplish acceptable volume of work under

normal situation ranks highest by the mean score rating (4.16) while ability to meet stipulated result/outcome has the lowest mean score (4.10).

Planning and organising showed that the ability to demonstrate skills in planning, organising and evaluating subordinate staff and ability to initiate clearer objectives ranks highest by the mean score rating (4.09), while ability to monitor and control resources had a low mean score (4.05). On supervision; ability to identify problems and proffer solutions ranks highest by the mean score rating (4.14), while ability to seek clearance when goals and priorities are unclear has the lowest mean score (4.05). On communication, ability to effectively communicate information and ideas orally and in writing ranks highest by the mean score rating (4.08), while ability to communicate effectively with gestures has the lowest mean score (4.04).

On creativity, ability to take realistic decisions ranks highest by the mean score rating (4.13) while ability to formulate alternative solution has the lowest mean score (4.01). On timeliness, ability to promptly execute tasks ranks highest by the mean score rating (4.15), while ability to prioritise tasks has the lowest mean score (4.07). On adaptability, ability to quickly and proficiently learn new methods and ability to perform tasks demanding physical strength had the highest mean score (4.12) respectively while ability to accept new challenges, responsibilities and assignments had the lowest mean score of mean score (3.96).

**Table 4.5d: Test of norm for level of task performance of librarians**

Intervals	Total Mean Score (ICT skills)	Remark
1-83		
84-166		
167-250	224.73	High

Table 4.5d presents calculated test of norm for level task performance of the respondents. The maximum ICT skills score of the respondent is  $5 \times 50 = 250$ . The maximum score of task performance of librarians is 250. When this is divided by 3 it will give us an interval of 83.3. A score of 1-83 indicates low task performance; a score of 84-166 indicates moderate task performance; and 167 -250 score indicates high task performance. Since the overall mean of the respondents is 224.73 which fall within the range of 167-250, it means the task performance of the respondents was high.

**Research Question 5a: What is the level of self-evaluation of task performance of library officers in public universities in southwestern Nigeria?**

**Table 4.6a: Level of self-evaluation of library officers' task performance**

S/N	Items	VH	H	MOD	L	VL	Mean	S.D.
<b>Knowledge: Ability to</b>								
1.	perform tasks in accordance with laid down principles and procedures	51 47.7%	48 44.9%	6 5.6%	%	2 1.9%	4.36	.76
2.	keep knowledge current	48 44.9%	47 43.9%	11 10.3%	%	1 0.9%	4.32	.73
3.	demonstrate knowledge and skills needed to perform tasks effectively	49 45.8%	44 41.1%	13 12.1%	%	1 0.9%	4.31	.76
4.	demonstrate depth, currency and job knowledge	50 46.7%	40 37.4%	15 14.0%	1 0.9%	1 0.9%	4.28	.81
5.	understand the library collections and core system	40 37.4%	51 47.7%	14 13.1%	%	2 1.9%	4.19	.80
<b>Skill: Ability to</b>								
6.	maintain skills in current tools and technologies necessary to complete job tasks	42 39.3%	56 52.3%	6 5.6%	1 0.9%	2 1.9%	4.26	.77
7.	demonstrate physical competency skills	41 38.3%	53 49.5%	11 10.3%	1 0.9%	1 0.9%	4.23	.75
8.	demonstrate affective skills	39 36.4%	55 51.4%	11 51.4%	1 0.9%	1 0.9%	4.21	.74
9.	demonstrate skills relevant to task	40 37.4%	51 47.7%	14 13.1%	1 0.9%	1 0.9%	4.20	.77
10.	pay attention to details	38 35.5%	53 49.5%	14 13.1%	1 0.9%	1 0.9%	4.18	.76
<b>Quality: Ability to</b>								
11.	carry out tasks accurately and neatly	49 45.8%	42 39.3%	14 13.1%	1 0.9%	1 0.9%	4.28	.80
12.	meet standard procedure for executing tasks	45 42.1%	49 45.8%	10 9.3%	1 0.9%	2 1.9%	4.25	.81
13.	multitask in an effective manner	43 40.2%	49 45.8%	13 12.1%	%	2 1.9%	4.22	.80
14.	produce exceptionally quality tasks	41 38.3%	49 45.8%	15 14.0%	%	2 1.9%	4.19	.81
15.	execute tasks with minimal errors	37 34.6%	52 48.6%	15 14.0%	1 0.9%	2 1.9%	4.13	.83
<b>Quantity: Ability to : Ability to</b>								
16.	ensure that outputs meet and exceed expectation	45 42.1%	46 43.0%	12 11.2%	%	4 3.7%	4.20	.92
17.	fulfil assigned responsibilities and duties	46 43.0%	45 42.1%	10 9.3%	2 1.9%	4 3.7%	4.19	.95
18.	meet stipulated results/outcomes	39 36.4%	56 52.3%	7 6.5%	2 1.9%	3 2.8%	4.18	.86
19.	manage quantifiable assignment	41 38.3%	41 38.3%	10 9.3%	%	4 3.7%	4.18	.89
20.	accomplish acceptable volume of work under normal situation	40 37.4%	51 47.7%	12 11.2%	%	4 3.7%	4.15	.90
<b>Planning and Organising: Ability to</b>								
21.	demonstrate skills in planning, organising and evaluating subordinate staff	40 37.4%	52 48.6%	13 12.1%	%	2 1.9%	4.20	.79
22.	exhibit strong organisation skills	35 32.7%	60 56.1%	7 6.5%	3 2.8%	2 1.9%	4.15	.81
23.	monitor and control resources	36 33.6%	55 51.4%	12 11.2%	1 0.9%	3 2.8%	4.12	.85
24.	identify resources that will meet organisational goals and objectives	31 29.0%	61 57.0%	11 10.3%	1 0.9%	3 2.8%	4.08	.83
25.	initiate clearer objectives	32 29.9%	58 54.2%	12 11.2%	3 2.8%	2 1.9%	4.07	.83

**\*\*Key: VH=Very High; H=High; M=Moderate; L=Low, VL= Very Low**

S/N	Items	VH	H	MOD	L	VL	Mean	S.D.
<b>Supervision:</b> Ability to								
26.	demonstrate quality leadership	35	62	7	1	2	4.19	.75
		32.7%	6%	6.5%	0.9%	1.9%		
27.	identify problems and proffer solutions	39	55	8	3	2	4.18	.83
		36.4%	51.4%	7.5%	2.8%	1.9%		
28.	seek clearance when goals and priorities are unclear	39	50	15	1	2	4.15	.83
		36.4%	46.7%	14.0%	0.9%	1.9%		
29.	influence other members of staff positively	34	60	9	1	3	4.13	.83
		31.8%	56.1%	8.4%	0.9%	2.8%		
30.	harness both human and material resources to achieve set goals	38	50	16	1	2	4.13	.84
		35.5%	46.7%	15.0%	0.9%	1.9%		
<b>Communication:</b> Ability to								
31.	effectively communicate information and ideas orally and in writing	38	57	9	1	2	4.20	.78
		35.5%	53.3%	8.4%	0.9%	1.9%		
32.	listen carefully and seek clarification to ensure understanding	40	51	12	2	2	4.17	.84
		37.4%	47.7%	11.2%	1.9%	1.9%		
33.	communicate effectively	39	51	11	4	2	4.13	.88
		36.4%	47.7%	10.3%	3.7%	1.9%		
34.	share information	33	62	7	3	2	4.13	.80
		30.8%	57.9%	6.5%	2.9%	1.9%		
35.	communicate effectively with gesture	40	50	12	1	4	4.13	.92
		37.4%	46.7%	11.2%	0.9%	3.7%		
<b>Creativity:</b> Ability to								
36.	identify and analyse problems	44	43	17		3	4.17	.90
		41.1%	40.2%	15.9%	%	2.8%		
37.	formulate alternative solutions	35	60	9	1	2	4.17	.77
		32.7%	56.1%	8.4%	0.9%	1.9%		
38.	take realistic decisions	40	49	15	1	2	4.16	.84
		37.4%	45.8%	14.0%	0.9%	1.9%		
39.	take appropriate action to resolve problems	33	59	12	1	2	4.12	.79
		30.8%	55.1%	11.2%	0.9%	1.9%		
40.	follow up to ensure problems are resolved	31	59	14	1	2	4.08	.79
		29.0%	55.1%	13.1%	0.9%	1.9%		
<b>Timeliness:</b> Ability to								
41.	complete allocated tasks on schedule	42	50	12		3	4.20	.85
		39.3%	45.7%	11.2%	%	2.8%		
42.	manage time well	43	43	15	3	3	4.12	.95
		40.2%	40.2%	14.0%	2.8%	2.8%		
43.	promptly execute tasks	40	47	15	2	3	4.11	.91
		37.4%	43.9%	14.0%	1.9%	2.8%		
44.	prioritise tasks	35	55	13	1	3	4.10	.86
		32.7%	51.4%	12.1%	0.9%	2.8%		
45.	constitently carry out assigned tasks	39	46	17	2	3	4.08	.92
		36.4%	43.0%	15.9%	1.9%	2.8%		
<b>Adaptability:</b> Ability to								
46.	quickly and proficiently learn new methods	44	54	4	2	3	4.25	.85
		41.1%	50.5%	3.7%	1.9%	2.8%		
47.	adapt to changes in direction and priority	42	48	14		3	4.18	.87
		39.3%	44.9%	13.1%	%	2.8%		
48.	perform tasks demanding physical strength	38	57	7	2	3	4.17	.85
		35.5%	53.3%	6.5%	1.9%	2.8%		
49.	adjust to new work processes	34	58	11	1	3	4.11	.84
		31.8%	54.2%	10.3%	0.9%	2.8%		
50.	accept new challenges responsibilities and assignments	31	53	21	1	1	4.05	.78
		29.0%	49.5%	19.6%	0.9%	0.9%		

**\*\*Key: VH=Very High; H=High; M=Moderate; L=Low, VL= Very Low**

Table 4.6a presents self evaluation of task performance among library officers. On job knowledge, ability to perform tasks in accordance with laid down principles and procedures ranked highest by the mean score rating (4.36), while ability to understand the library collections and core system

has the lowest mean score (4.19). On job skills, ability to maintain skills in current tools and technologies necessary to complete job tasks ranks highest by the mean score rating (4.26), while ability to pay attention to details has the lowest (mean score (4.18).

While task quality indicated that, the ability to carry out task accurately and neatly has a mean score of (4.28) which ranks highest by the mean score rating, the ability to execute tasks without errors has the lowest mean score (4.13). On task quantity, ability to ensure that outputs meet and exceed expectation (4.20) ranks highest by the mean score rating, while ability to accomplish acceptable volume of work under normal situation has the lowest mean score (4.15).

Planning and organising shows that, the ability to demonstrate skills in planning, organising and evaluating subordinate staff ranks highest by the mean score rating (4.20), while ability to initiate clearer objectives has the lowest mean score (4.07). On supervision, ability to demonstrate quality leadership ranks highest by the mean score rating (4.19) while ability to harness both human and materials resources to achieve set goals has the lowest mean score (4.13). On communication, ability to effectively communicate information and ideas orally and in writing ranked highest by the mean score rating (4.20), while ability to communicate effectively with gesture has the lowest mean score (4.13).

On creativity, ability to identify and analyse problem and ability to formulate alternative solution ranks highest by the mean score rating (4.17), while ability to ensure problems are resolved has the lowest mean score (4.08). On timelines, ability to complete allocated tasks on schedule ranks highest by the mean score rating (4.20) while ability to consistently carry out assigned tasks has the lowest mean score (4.08). On adaptability, ability to quickly and proficiently learn new methods (4.25) ranks highest by the mean score rating, while ability to accept new challenges, responsibilities and assignments has the lowest mean score (4.05).

**Research Question 5b: What is the level of task performance of library officers as evaluated by supervisors in public university in southwestern Nigeria?**

**Table 4.6b Supervisors' evaluation of library officers' task performance**

S/N	Items	VH	H	MOD	L	VL	Mean	S.D.
<b>Job Knowledge: Ability to</b>								
1.	perform tasks in accordance with laid down principles and procedures	38 35.5%	49 4.8%	16 15.0%	2 1.9%	2 1.9%	4.11	.86
2.	demonstrate knowledge and skills needed to perform tasks effectively	27 25.2%	60 56.1%	15 14.0%	3 2.8%	2 1.9%	4.00	.82
3.	understand the library collections and core system	27 25.2%	51 47.7%	24 22.4%	3 2.8%	2 1.9%	3.92	.87
4.	keep knowledge current	26 24.3%	55 51.4%	18 16.8%	6 5.6%	2 1.9%	3.91	.90
5.	demonstrate depth, currency and job knowledge	18 16.8%	61 57.0%	21 19.6%	4 3.7%	3 2.8%	3.81	.86
<b>Job Skills: Ability to</b>								
6.	demonstrate skills relevant to task	27 25.2%	56 52.3%	17 15.9%	5 4.7%	2 1.9%	3.94	.88
7.	demonstrate affective skills	26 24.3%	56 52.3%	20 18.7%	3 2.8%	2 1.9%	3.94	.84
8.	demonstrate physical competency skills	23 21.5%	59 55.1%	19 17.8%	3 2.8%	3 2.8%	3.90	.87
9.	pay attention to details	21 19.6%	57 53.3%	25 23.4%	1 0.9%	3 2.8%	3.86	.84
10.	maintain skills in current tools and technologies necessary to complete job tasks	24 22.4%	53 49.5%	22 20.6%	5 4.7%	3 2.8%	3.84	.92
<b>Task Quality: Ability to</b>								
11.	carry out task accurately and neatly	24 22.4%	58 54.2%	21 19.6%	2 1.9%	2 1.9%	3.93	.82
12.	meet standard procedure for executing tasks	27 25.2%	53 49.5%	22 20.6%	3 2.8%	2 1.9%	3.93	.86
13.	produce exceptionally quality tasks	27 25.2%	50 46.7%	26 24.3%	1 0.9%	3 2.8%	3.91	.89
14.	execute tasks with minimal errors	20 18.7%	57 53.3%	26 24.3%	1 0.9%	3 2.8%	3.84	.84
15.	multitask in an effective manner	22 20.6%	53 49.5%	26 24.3%	4 3.7%	2 1.9%	3.83	.86
<b>Task Quantity: Ability to</b>								
16.	accomplish acceptable volume of work under normal situation	25 23.4%	55 51.4%	21 19.6%	4 3.7%	2 1.9%	3.91	.86
17.	meet stipulated results/outcomes	28 26.2%	48 44.9%	24 22.4%	5 4.7%	2 1.9%	3.89	.91
18.	manage quantifiable assignment	26 24.3%	52 48.6%	21 19.6%	4 3.7%	4 3.7%	3.86	.96
19.	fulfil assigned responsibilities and duties	21 19.6%	56 52.3%	20 18.7%	7 6.5%	3 2.8%	3.79	.93
20.	ensure that outputs meet and exceed expectation	18 16.8%	56 52.3%	28 26.2%	1 0.9%	4 3.7%	3.78	.87
<b>Planning and Organising: Ability to</b>								
21.	demonstrate skills in planning, organising and evaluating subordinate staff	29 27.1%	49 45.8%	22 20.6%	4 3.7%	3 2.8%	3.91	.94
22.	initiate clearer objectives	22 20.6%	59 55.1%	22 20.6%	1 0.9%	3 2.8%	3.90	.83
23.	exhibit strong organisation skills	27 25.2%	50 46.7%	24 22.4%	3 2.8%	3 2.8%	3.89	.91
24.	monitor and control resources	22 20.6%	55 51.4%	26 24.3%	1 0.9%	3 2.8%	3.86	.85
25.	identify resources that will meet organisational goals and objectives	19 17.8%	59 55.1%	25 23.4%	1 0.9%	3 2.8%	3.84	.83

**\*\*Key: VH=Very High; H=High; M=Moderate; L=Low, VL= Very Low**

S/N	Items	VH	H	MOD	L	VL	Mean	S.D.
<b>Supervision: Ability to</b>								
26.	demonstrate quality leadership	26 24.3%	55 51.4%	21 19.6%	2 1.9%	3 2.8%	3.93	.88
27.	influence other members of staff positively	20 18.7%	66 61.7%	17 15.9%	1 0.9%	3 2.8%	3.93	.80
28.	identify problems and proffer solutions	21 19.6%	63 58.9%	20 18.7%	%	3 2.8%	3.93	.80
29.	harness both human and material resources to achieve set goals	20 18.7%	61 57.0%	23 21.5%	%	3 2.8%	3.89	.80
30.	seek clearance when goals and priorities are unclear	17 15.9%	61 57.0%	22 20.6%	4 3.7%	3 2.8%	3.79	.85
<b>Communication: Ability to</b>								
31.	listen carefully and seek clarification to ensure understanding	29 27.1%	65 60.7%	13 12.1%	%	%	4.15	.61
32.	communicate effectively with gesture	22 20.6%	53 49.5%	25 23.4%	4 3.7%	3 2.8%	3.81	.90
33.	effectively communicate information and ideas orally and in writing	14 13.1%	66 61.7%	22 20.6%	2 1.9%	3 2.8%	3.80	.79
34.	communicate effectively	17 15.9%	58 54.2%	26 24.3%	3 2.8%	3 2.8%	3.78	.85
35.	share information	18 16.8%	54 50.5%	30 28.0%	2 1.9%	3 2.8%	3.77	.85
<b>Creativity: Ability to</b>								
36.	take realistic decisions	28 26.2%	52 48.6%	15 14.0%	9 8.4%	3 2.8%	3.87	.99
37.	follow up to ensure problems are resolved	25 23.4%	53 49.5%	19 17.8%	7 6.5%	3 2.8%	3.84	.95
38.	take appropriate action to resolve problems	23 21.5%	54 50.5%	21 19.6%	6 5.6%	3 2.8%	3.82	.93
39.	formulate alternative solutions	19 17.8%	61 57.0%	19 17.8%	5 4.7%	2 2.8%	3.82	.88
40.	identify and analyse problems	18 16.8%	55 51.4%	28 26.2%	3 2.8%	3 2.8%	3.77	.86
<b>Timeliness: Ability to</b>								
41.	manage time well	28 26.2%	53 49.5%	19 17.8%	4 3.7%	3 2.8%	3.93	.92
42.	promptly execute tasks	55 51.4%	14 13.1%	14 13.1%	7 6.5%	3 2.8%	3.92	.95
43.	Ability to consistently carry out assigned tasks	24 22.4%	54 50.5%	22 20.6%	4 3.7%	3 2.8%	3.86	.91
44.	prioritise tasks	23 21.5%	55 51.4%	21 19.6%	4 3.7%	4 3.7%	3.83	.94
45.	complete allocated tasks on schedule	18 16.8%	63 58.9%	19 17.8%	4 3.7%	3 2.8%	3.83	.85
<b>Adaptability: Ability to</b>								
46.	accept new challenges responsibilities and assignments	40 37.4%	53 49.5%	14 13.1%	%	%	4.24	.67
47.	adjust to new work processes	21 19.6%	60 56.1%	20 18.7%	2 1.9%	4 3.7%	3.86	.88
48.	quickly and proficiently learn new methods	21 19.6%	60 56.1%	19 17.8%	4 3.7%	3 2.8%	3.86	.87
49.	adapt to changes in direction and priority	19 17.8%	62 57.9%	19 17.8%	5 4.7%	2 1.9%	3.85	.83
50.	perform tasks demanding physical strength	19 17.8%	58 54.2%	23 21.5%	3 2.8%	4 3.7%	3.79	.90

**\*\*Key: VH=Very High; H=High; M=Moderate; L=Low, VL= Very Low**

Table 4.6b presents supervisors' evaluation of task performance among library officers. On job knowledge; ability to perform tasks in accordance with laid down principles and procedures ranks highest by the mean score rating (4.11) while ability to demonstrate depth, currency and job knowledge has the lowest mean score (3.81) score. On job skills; ability to demonstrate skills

relevant to task ranks highest by the mean score rating (3.94) while ability to maintain skills in current tools and technologies necessary to complete job tasks had the lowest mean score (3.84). On task quality, ability to carry out task accurately and neatly ranks highest by the mean score rating (3.93), while ability to multitask in an effective manner has the lowest mean score (3.83). On task quantity, ability to carry out task accurately and neatly ranks highest by the mean score rating (3.93), while ability to multitask in an effective manner has the lowest mean score (3.83).

Planning and organising indicates that the ability to demonstrate skills in planning, organising and evaluating subordinate staff has the highest by the mean score rating (3.91), while ability to identify resources that will meet organisational goals and objectives has the lowest mean score (3.84). Supervision and management shows that, the ability to demonstrate quality leadership ranks highest by the mean score rating (3.93), while ability to seek clearance while goals and priorities are unclear has the lowest mean score (3.79). On communication; ability to listen carefully and seek clarification to ensure understanding ranks highest by the mean score rating (4.15), while ability to share information has the lowest mean score (3.77).

Creativity involves the ability to take realistic decisions which ranks highest by the mean score rating (3.87), while ability to identify and analyse problems has the lowest mean score (3.77). On timeliness, ability to manage time well ranks highest by the mean score rating (3.93), while ability to complete allocated tasks on schedule has the lowest mean score (3.83). On adaptability, ability to accept new challenges responsibilities and assignments ranks highest by the mean score rating (4.24), while ability to perform tasks demanding physical strength has the lowest mean score (3.79).

**Research Question 5a: What is the summation of library officers' level of task performance in universities in southwestern Nigeria?**

**Table 4.6c: Overall summation of task performance of the library officers**

S/N	Items	Mean Self Assessment	Mean Supervisors Assessment	Overall Average
	<b>Job Knowledge:</b> Ability to			
1.	perform tasks in accordance with laid down principles and procedures	4.36	4.11	4.24
2.	understand the library collections and core system	4.19	3.92	4.06
3.	keep knowledge current	4.32	3.91	4.12
4.	demonstrate knowledge and skills needed to perform tasks effectively	4.31	4.00	4.15
5.	demonstrate depth, currency and job knowledge	4.28	3.81	4.05
	<b>Job Skills:</b> Ability to			
6.	demonstrate skills relevant to task	4.2	3.94	4.07
7.	demonstrate physical competency skills	4.23	3.9	4.07
8.	demonstrate affective skills	4.21	3.94	4.08
9.	pay attention to details	4.18	3.86	4.02
10.	maintain skills in current tools and technologies necessary to complete job tasks	4.26	3.84	4.05
	<b>Task Quality:</b> Ability to			
11.	carry out tasks accurately and neatly	4.28	3.93	4.11
12.	meet standard procedure for executing tasks	4.25	3.93	4.09
13.	multitask in an effective manner	4.22	3.83	4.03
14.	produce exceptionally quality output	4.19	3.91	4.05
15.	execute tasks with minimal errors	4.13	3.84	3.99
	<b>Task Quantity:</b> Ability to			
16.	accomplish acceptable volume of work under normal situation	4.15	3.91	4.03
17.	fulfil assigned responsibilities and duties	4.19	3.79	3.99
18.	ensure that outputs meet and exceed expectation	4.2	3.78	3.99
19.	meet stipulated results/outcomes	4.18	3.89	4.04
20.	manage quantifiable assignment	4.18	3.86	4.02
	<b>Planning and Organising:</b> Ability to			
21.	demonstrate skills in planning, organising and evaluating subordinate staff	4.20	3.91	4.06
22.	initiate clearer objectives	4.07	3.9	3.99
23.	monitor and control resources	4.12	3.86	3.99
24.	exhibit strong organisation skills	4.15	3.89	4.02
25.	identify resources that will meet organisational goals and objectives	4.08	3.84	3.96

S/N	Items	Mean Self Assessment	Mean Supervisors Assessment	Overall Average
	<b>Supervision:</b> Ability to			
26.	seek clearance when goals and priorities are unclear	4.15	3.79	3.97
27.	demonstrate quality leadership	4.19	3.93	4.06
28.	influence other members of staff positively	4.13	3.93	4.03
29.	harness both human and material resources to achieve set goals	4.13	3.89	4.01
30.	Ability to identify problems and proffer solutions	4.18	3.93	4.06
	<b>Communication:</b> Ability to			
31.	listen carefully and seek clarification to ensure understanding	4.17	4.15	4.16
32.	effectively communicate information and ideas orally and in writing	4.20	3.80	4.00
33.	communicate effectively	4.13	3.78	3.96
34.	share information	4.13	3.77	3.95
35.	communicate effectively with gesture	4.13	3.81	3.97
	<b>Creativity:</b> Ability to			
36.	take realistic decisions	4.16	3.87	4.02
37.	take appropriate action to resolve problems	4.12	3.82	3.97
38.	follow up to ensure problems are resolved	4.08	3.84	3.96
39.	identify and analyse problems	4.17	3.77	3.97
40.	formulate alternative solutions	4.17	3.82	4.00
	<b>Timeliness:</b> Ability to			
41.	promptly execute tasks	4.11	3.92	4.02
42.	manage time well	4.12	3.93	4.03
43.	prioritise tasks	4.1	3.83	3.97
44.	consistently carry out assigned tasks	4.08	3.86	3.97
45.	complete allocated tasks on schedule	4.2	3.83	4.02
	<b>Adaptability:</b> Ability to			
46.	accept new challenges responsibilities and assignments	4.05	4.24	4.14
47.	adjust to new work processes	4.11	3.86	3.99
48.	quickly and proficiently learn new methods	4.25	3.86	4.06
49.	to adapt to changes in direction and priority	4.18	3.85	4.01
50.	perform tasks demanding physical strength	4.17	3.79	3.98

Overall mean 219.87

Table 4.6c presents overall summation of task performance among library officers. Job knowledge shows that the ability to perform tasks in accordance with laid down principles and procedures ranks highest by the mean score rating (4.24), while ability to demonstrate depth, currency and job knowledge has the lowest (4.05) score. On job skills, ability to demonstrate affective skills ranks highest by the mean score rating (4.08), while ability to pay attention to details has the lowest (4.02) score. On task quality, ability to carry out task accurately and neatly ranks highest by the mean score rating (4.11), while ability to execute tasks without errors has the lowest score (3.99). On task quantity, ability to carry out task accurately and neatly ranks

highest by the mean score rating (4.11), while ability to execute tasks without errors has the lowest mean score (3.99).

Planning and organising indicates the ability to demonstrate skills in planning, organising and evaluating subordinate staff ranks highest by the mean score rating(4.06), while ability to identify resources that will meet organisation goals and objectives has the lowest score (3.96). On supervision, ability to demonstrate quality leadership and ability to identify problems and proffer solutions ranks highest by the mean score rating (4.06), while ability to seek clearance when goals and priorities are unclear has the lowest mean score. On communication, ability to listen carefully and seek clarification to ensure understanding has the highest mean score ratings (4.16), while ability to share information has the lowest mean score (3.95).

On creativity, ability to take realistic decisions ranks highest by the mean score rating (4.02), while ability to follow up to ensure problems are resolved has the lowest mean score (3.96). On timeliness, ability to manage time well ranks highest by the mean score rating (4.03), while ability to consistently carry out assigned tasks has the lowest mean score (3.97). On adaptability, ability to accept new challenges, responsibilities and assignments ranks highest by the mean score rating (4.14), while ability to perform tasks demanding physical strength has the lowest mean score (3.98).

**Table 4.6d: Test of norm for level of task performance of the library officers**

Intervals	Total Mean Score (ICT skills)	Remark
1-83		
84-166		
167-250	219.87	High

Table 4.6d presents test of norm for the level of task performance of librarians as respondents. To arrive at the maximum task performance score of the respondents  $5 \times 50 = 250$ . The maximum score of task performance of librarians is 250. When this is divided by 3 it will give us an interval of 83. A score of 1-83 indicates low task performance; a score of 84-166 indicates moderate task performance; and a score of 167-250 indicates high task performance. Since the overall mean of the respondents is 224.73, which fall within the range of 27-52, it means that the task performance of the respondents was high.

**What is the overall summation of task performance of library personnel?**

**Table 4.7a: Overall summation of task performance of the library personnel**

S/N	Statements	Mean of Self Assessment	Mean of Supervisor's Assessment	Overall Average
	<b>Job Knowledge:</b> Ability to			
1	perform tasks in accordance with laid down principles and procedures	4.28	3.94	4.11
2	understand the library collections and core systems	4.33	3.92	4.13
3	keep knowledge current	4.35	3.94	4.15
4	demonstrate knowledge and skills needed to perform tasks effectively	4.29	3.88	4.08
5	Ability to demonstrate depth, currency and job knowledge	4.25	3.96	4.11
	<b>Job Skills:</b> Ability to			
6	demonstrate skills relevant to task	4.28	3.90	4.09
7	demonstrate Physical competency skills	4.26	3.92	4.09
8	demonstrate affective skills	4.25	3.88	4.06
9	pay attention to details	4.30	3.90	4.10
10	maintain skills in current tools and technologies necessary to complete job tasks	4.33	3.93	4.13
	<b>Task Quality:</b> Ability to			
11	carry out task accurately and neatly	4.29	3.98	4.13
12	meet standard procedure for executing tasks	4.28	3.92	4.10
13	multi task in an effective manner	4.20	3.95	4.07
14	produce exceptionally quality tasks	4.21	3.90	4.05
15	execute tasks without errors	4.23	3.95	4.09
	<b>Task Quantity:</b> Ability to			
16	accomplish acceptable volume of work under normal situation	4.26	3.85	4.06
17	fulfil assigned responsibilities and duties	4.29	3.79	4.04
18	ensure that outputs meet and exceeds expectation	4.24	3.86	4.05
19	meet stipulated results/outcomes	4.21	3.88	4.05
20	demonstrate skills in planning, organising and evaluating subordinate staff	4.23	3.91	4.07
	<b>Planning and Organising:</b> Ability to			
21	manage quantifiable assignments	4.15	3.94	4.04
22	initiate clearer objectives	4.20	3.85	4.02
23	monitor and control resources	4.20	3.92	4.06
24	exhibit strong organization skills	4.15	3.88	4.01
25	identify resources that will meet organization goals and objectives	4.18	3.85	4.01

S/N	Statements	Mean of Self Assessment	Mean of Supervisors Assessment	Overall Average
26	<b>Supervision and Management:</b> Ability to seek clearance when goals and priorities are unclear	4.28	3.90	4.09
27	demonstrate quality leadership	4.22	3.92	4.07
28	influence other members of staff positively	4.21	3.94	4.07
29	harness both human and material resources to achieve set goals	4.26	3.95	4.10
30	identify problems and proffer solution	4.24	3.90	4.06
31	<b>Communication:</b> Ability to listen carefully and seek clarification to ensure understanding	4.24	3.95	4.09
32	effectively communicate information and ideas orally and in writing	4.21	3.88	4.00
33	share information clearly and concisely.	4.17	3.86	4.04
34	communicate effectively	4.17	3.86	4.01
35	communicate with body gesture	4.17	3.95	4.06
36	<b>Creativity:</b> Ability to identify and analyse problems	4.23	3.92	4.07
37	take appropriate action to resolve to resolve problems	4.19	3.90	4.09
38	formulate alternative solution	4.18	3.90	4.04
39	follow up to ensure problems are resolved	4.18	3.86	4.02
40	take realistic decision	4.15	3.86	4.00
41	<b>Timeliness:</b> Ability to promptly execute task	4.23	3.97	4.10
42	manage time well	4.22	3.97	4.09
43	prioritise tasks	4.22	3.93	4.07
44	consistently carry out assigned tasks	4.21	3.92	4.06
45	complete allocated task on schedule	4.18	3.88	4.03
46	<b>Adaptivity:</b> Ability to adapt to changes in direction and priority	4.27	3.97	4.12
47	adjust to new work processes	4.23	3.93	4.08
48	quickly and proficiently learn new methods	4.23	3.91	4.07
49	accept new challenges responsibilities and assignments	4.19	3.90	4.04
50	perform tasks demanding physical strength	4.17	3.97	4.03

Table 4.7a presents the overall summary of task performance of respondents. On job knowledge, the ability to keep knowledge up to date receive the highest mean score ratings of 4.15 while ability to demonstrate knowledge and skills needed to perform tasks effectively has the lowest mean score of 4.08. On job skills: Ability to demonstrate skills relevant to task and

ability to maintain skills in current tools and technologies necessary to complete job tasks had the highest mean score ratings with ability to demonstrate effective skills and pay attention to details has the lowest mean score 4.10. On task quality, ability to multitask in an effective manner had the highest mean score of 4.13, lowest mean score is 4.05 Task Quantity: demonstrate skills in planning, organising and evaluating subordinate staff 4.07 while ability to complete assigned responsibilities and duties has the lowest mean score 4.04.

While planning and organising indicates that the ability to monitor and control resources has the highest mean score 4.06, the ability to exhibit strong organization skills as well as ability to identify resources that will meet organization goals and objectives had the lowest mean score 3.01 in his group. On Supervision and management, the ability to harness both human and material resources to achieve set goals has 4.09 while the identify problems and proffer solution has the lowest mean score 4.06. On communication, the ability to listen carefully and seek clarification to ensure understanding has the highest mean score of 4.09 while ability to effectively communicate information and ideas orally and in writing has the lowest mean score 4.00.

On creativity ability to take appropriate action to resolve problems has the highest mean score 4.09 while ability to take realistic decision has the lowest mean score of 4.00. Ability to promptly execute task has the highest mean score of 4.10 while ability to complete allocated task on schedule has the highest mean score rating of 4.03. On adaptability, the ability of adapt to changes in direction and priority has the highest mean score of 4.12 while the ability to perform tasks demanding physical strength has the lowest mean score of 4.03.

**Table 4.7b: Test of norm for level of library personnel task performance**

Intervals	Total Mean Score	Remark
1-83		
54-166		
167-250	222.68	High

Table 4.7b presents test of norm for the level of task performance of library personnel. The total maximum score is 250. Scores ranging from 1-83 indicates low task performance, while that of 84 -165 indicate moderate task performance, and 166-250 indicates high task performance. Since the means score of task performance of the respondents ( $\bar{x}$ = 222. 68, SD

30.96) falls within the range of 166 – 250 it means that the task performance of respondents is high.

**Research 7: What is the relationship among demographics, ICT skills and use of library personnel in public universities in southwestern Nigeria?**

**Table 4.8:Relationship among demographics and ICT skills and use by library personnel**

Items	Task performance	Gender	Age	Marital Status	Job Status	Educ. Status	Years of Experience	Level of Income	ICT Use	ICT Skills	Mean	S.D
<b>ICT Use</b>	0.132*	0.998	0.10	0.191*	0.654	0.496	0.921	0.336	1.000		47.97	14.28
	0.026	0.001	9 0.00 2	0.002	0.029	0.043	0.006	-0.001				
<b>ICT Skills</b>	0.336*	0.951	0.14	0.990	0.922	0.550	0.736	0.163*	*0.000	1.000	80.91	19.60
	0.000	-0.004	4 0.00 3	0.001	-0.006	0.038	0.022	0.010	0.187			

Table 4.8 indicates that there are significant relationships among demographics and ICT skills of library personnel. Gender ( $r = -0.951$ ;  $P < 0.05$ ), age ( $r = 0.144$ ;  $P < 0.05$ ), marital status ( $r = -0.990$ ;  $P < 0.05$ ), job status ( $r = 0.922$ ;  $P > 0.05$ ), educational status ( $r = -0.550$ ;  $P > 0.05$ ), work experience ( $r = 0.736$ ;  $P > 0.05$ ) and level of income ( $r = -0.163$ ;  $P < 0.05$ ) and ICT skills.

Similarly, Table 4.8 indicates that there are significant relationships between demographics and ICT use of library personnel in public university libraries in the southwestern Nigeria. Gender ( $r = 0.998$ ;  $P < 0.05$ ), age ( $r = 0.109$ ;  $P < 0.05$ ), marital status ( $r = 0.191$ ,  $P < 0.05$ ), job status ( $r = 0.654$ ,  $P > 0.05$ ); educational status ( $r = 0.496$ ,  $P < 0.05$ ) work experience ( $r = 0.921 = P > 0.05$ ), and level of income ( $r = -0.336$   $P < 0.05$ ).

**Research Question 8: What is the relative contribution of demographics (Gender, Age, Marital Status, Job Status, Educational Status, Work Experience, Level of Income), ICT Skills, Access to ICT Facilities and ICT Use to Task Performance of library personnel in public university libraries in southwestern Nigeria?**

**Table 4.9: Relative influence of demographics, ICT skills, access and use on task performance of the respondents**

Model	Unstandardized Coefficient Regression		Standardised. Coefficient Regression	T	Sig. P
	B	Std. Error	Beta Contribution		
(Constant)	156.331	16.778		9.318	.000
Gender	4.742	3.972	-.073	1.194	.234
Age	1.594	0.513	.065	3.107	.003*
Marital Status	8.588	4.275	.138	2.009	.046*
Educational Status	0.915	0.277	-.081	3.303	.008*
Job Status	2.402	1.957	.075	1.227	.221
Work Experience	2.539	1.245	.140	2.039	.043*
Level of Income	-3.682	3.038	-.077	1.212	.227
ICT Skills	0.560	.102	.354	5.481	.000*
Access to ICT Facilities	0.572	.115	.022	4.974	.005*
ICT Use	0.474	.109	.080	4.348	.031*

Table 4.9 reveals the significant influence of each of the independent variables on the dependent variable task performance. Individually, age ( $\beta = 1.594$ ,  $t = 3.107$   $P < 0.05$ ), marital status ( $\beta = 8.588$ ,  $t = 2.009$ ,  $P < 0.05$ ), educational status ( $\beta = 0.915$ ,  $t = 3.303$   $P < 0.05$ ), and work experience ( $\beta = 2.539$ ,  $t = 2.039$   $P < 0.05$ ) have significant influence on task performance of the respondents while gender ( $\beta = 4.742$ ,  $t = 1.194$   $P > 0.05$ ), job status ( $\beta = 2.402$ ,  $t = 1.227$   $P > 0.05$ ), level of income ( $\beta = 3.682$ ,  $t = 1.212$   $P > 0.05$ ) do not significantly influence task performance. Individually, ICT skills ( $\beta = 0.560$ ,  $t = 5.481$   $P < 0.05$ ), access to ICT ( $\beta = 0.572$ ,  $t = 4.974$   $P < 0.05$ ), and ICT use ( $\beta = 0.474$ ,  $t = 4.348$   $P < 0.05$ ) had significant influence on task performance of the respondents.

## 4.6 Hypotheses testing

This section presents the results of the five null hypotheses tested at 0.05 level of significance.

**Hypothesis 1: There is no significant relationship between demographics and task performance of library personnel in public universities in southwestern Nigeria.**

**Table 4.10: Relationships among demographics, ICT skills, access and use and task performance of respondents**

	Task Performance	Gender	Age	Marital Status	Job Status	Educ. Status	Years of Experience	Level of Income	ICT Use	ICT Skills	ICT Access	Mean	S.D
Task performance	1											222.68	30.96
Gender	-0.348* (0.041)	1										1.34	0.48
Age	0.377* (0.025)	0.356 (0.009)	1									42.70	8.72
Marital Status	0.308* (0.011)	0.212* (0.001)	-0.060 (0.347)	1								1.69	0.50
Job Status	-0.377* (0.025)	0.361 (0.018)	-0.062 (0.329)	0.140* (0.028)	1							6.28	2.78
Educational Status	0.302* (0.022)	0.948 (0.004)	0.126* (0.047)	-0.116 (0.069)	-0.030 (0.641)	1						2.65	0.97
Work Experience	0.408* (0.021)	0.890 (0.009)	0.212* (0.001)	0.298* (0.000)	0.007 (0.919)	-0.001 (0.986)	1					28.75	3.62
Level of Income	-0.476* (0.036)	0.922 (0.006)	0.035 (0.588)	0.179* (0.005)	0.111 (0.082)	0.04 (0.467)	0.242* (0.000)	1				2.65	0.65
ICT Use	0.132* (0.026)	0.998 (0.001)	0.109 (0.002)	0.191* (0.002)	0.654 (0.029)	0.496 (0.043)	0.921 (0.006)	0.336 (0.001)	1			47.97	14.28
ICT Skills	0.336* (0.000)	0.951 (0.004)	0.144 (0.003)	0.990 (0.001)	0.922 (-0.006)	0.550 (0.038)	0.736 (0.022)	0.163 (0.010)	0.187* (0.000)	1		80.91	19.60
ICT Access	0.349* (0.000)	0.338 (0.061)	0.435 (0.050)	-0.146* (0.021)	0.077 (0.227)	0.087 (0.171)	-0.126* (0.047)	0.515 (0.042)	0.674* (0.000)	0.332* (0.000)	1.000	43.58	12.17

**\*\*Significant at P < 0.05( ) sig P values**

This study tested five hypotheses at the 0.05 level of significance. The result is presented as follows: Table 4.10 reveals that there are significant relationship among task performance and demographics like gender ( $r = -0.348^{**}$ ,  $P < 0.05$ ), Age ( $r = 0.377$ ,  $P > 0.05$ ) and task performance; Task performance and marital status ( $r = 0.308^{**}$ ;  $P < 0.05$ ), Task performance and job status ( $r = 0.377^{**}$ ,  $P < 0.05$ ), Task performance and education ( $r = 0.302$ ,  $P < 0.05$ ), Task performance and work experience ( $r = 0.408^{**}$ ;  $P < 0.05$ ), Task performance and level of income ( $r = 0.476^{**}$ ;  $P < 0.05$ ). This implies that demographics (gender, age, job status, educational status, years of experience, and income) had significant relationship with task performance of respondents.

**Hypothesis 2: There is no significant relationship among demographics and ICT skills of library personnel in university libraries in the southwestern Nigeria.**

Table 4.10 indicates that significant relationship existed among task performance and ICT skills of library personnel in public university libraries in the southwestern with ( $r = 0.336$ ;  $P < 0.05$ ).

**Hypothesis 3: There is no significant relationship between task performance and ICT access of library personnel in university libraries in southwestern Nigeria.**

Table 4.10 indicates a significant relationship between task performance and ICT access among library personnel in public university libraries in southwestern Nigeria with ( $r = 0.349$ ;  $P < 0.05$ ).

**Hypothesis 4: There is no significant relationship between task performance and ICT use of library personnel in university libraries in the southwestern Nigeria.**

Table 4.10 indicates a significant relationship between task performance and ICT use of library personnel in public university libraries in southwestern Nigeria. ( $r = 0.132$ ;  $P < 0.05$ ).

**Hypothesis 5: There is no joint effect of demographics (gender, age, marital status, job status, educational status, work experience, level of income), ICT skills, access and use on task performance.**

**Table 4.11: Joint contribution of the demographics, ICT skills, access and use on task performance**

R	R Square		Adjusted R Square	Std. Error of the Estimate		
0.430	.185		.130	28.6022		
A N O V A						
Model	Sum of Squares	DF	Mean Square	F	Sig. P	Remark
Regression	43689.262	10	4368.926	5.340	.004	Sig.
Residual	193068.61	236	818.087			
Total	236757.87	246				

Table 4.11 reveals a significant joint contributions of demographics (gender, age, marital status, educational status, years of experience, level of income, ICT skills, access to ICT facilities and ICT use) on the dependent variable task performance. The table indicates a coefficient of multiple correlation of  $R = 0.430$  and a multiple  $R^2$  of 0.185. This means that 18.5% of the variance was accounted for by the predictor variables when taken together. The significance of

the composite contribution was tested at  $P < 0.05$ . The table also shows that the analysis of variance (ANOVA) for the regression yielded a F-ratio of 5.340 (significant at 0.05 level). This implies that the joint contribution of the independent variables to the dependent variable was significant, and that other variables not included in this model may have accounted for the remaining variance of 77.5%. This implies that the independent variables, demographics, ICT skills, access and use have significant effects on the dependent variable task performance.

**Table 4.12: Mean and standard deviation scores on task performance, ICT skills, access use of library personnel**

S/N	University	N	Task Performance		ICT Skills		Access to ICT Facilities		ICT Use	
			Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
1.	Adekunle Ajasin University, Akungba-Akoko	8	228.5000	24.5677	75.1250	24.0264	38.2500	9.8380	42.5000	7.0305
2.	Ekiti State University, Ado Ekiti	32	217.1094	23.5426	79.5000	19.1951	47.0625	11.5282	52.9688	16.4130
3.	Federal University of Agriculture Abeokuta	19	224.8158	32.0209	83.6316	18.5389	44.4737	11.3302	49.2632	11.4835
4.	Federal University of Technology Akure	13	233.5000	14.1907	83.0769	21.2111	38.7692	15.1005	42.8462	15.5769
5.	Federal University of Technology Oye-Ekiti	8	238.7500	22.2903	73.7500	8.8600	44.1250	13.0432	55.2500	11.8653
6.	Ladoke Akintola University of Technology, Ogbomosho	19	226.0000	21.4496	85.0000	6.8394	50.1579	12.7412	50.8421	13.7043
7.	Lagos State University, Ojoo	16	231.2833	31.6928	82.0625	21.5452	40.8750	10.2948	45.0000	12.8426
8.	Obafemi Awolowo University, Ile-Ife	30	209.2833	47.2847	77.2000	27.0216	40.9000	11.6274	45.0333	16.4934
9.	Olabisi Onabanjo University, Ago-Iwoye	21	237.2857	20.9980	74.7143	17.5218	40.9048	11.6013	44.8571	17.4565
10.	Osun State University, Osogbo	15	221.7000	23.6325	84.4667	16.2211	39.6667	10.0546	45.4000	14.8555
11.	Tai Solarin University of Education, Ijebu-Ode	8	221.8125	43.7403	72.2500	25.3081	36.6250	12.1413	41.3750	9.6944
12.	University of Ibadan	44	218.8750	34.4181	82.4318	18.5402	44.2045	12.2978	49.0227	11.3619
13.	University of Lagos	15	216.4000	17.7696	91.7333	17.0146	51.2000	10.8048	51.8667	14.4956

Table 4.12 shows the mean and standard deviation scores on task performance, ICT skills, access to ICT facilities and ICT use across the universities studied. Federal University Oye-Ekiti had highest mean score for task performance ( $\bar{x}=238.75$ ), followed by Olabisi Onabanjo Ago-Iwoye ( $\bar{x}=237.28$ ), while the lowest mean score for task performance was recorded by Obafemi Awolowo University, Ile-Ife with ( $\bar{x}=209.28$ ). The University of Lagos had a mean score ( $\bar{x}=216.40$ ).

On ICT skills, the University of Lagos had the highest ( $\bar{x}=97.73$ ), followed by Ladoke Akintola University with a ( $\bar{x}=85.00$ ), while Federal University of Technology Oye-Ekiti had the lowest ( $\bar{x}=73.75$ ), as well as Tai Solarin with a ( $\bar{x}=72.25$ ). However, the ICT skills across all the university libraries studied was high.

On Access to ICT by library personnel, the University of Lagos had the highest ( $\bar{x}=51.20$ ), followed by Ladoke Akintola University of Technology with a ( $\bar{x}=50.16$ ), while the least ( $\bar{x}=36.63$ ) was recorded by Tai Solarin, Adekunle Ajasin, and Federal University of Technology Akure with ( $\bar{x}=38.25$ ) and ( $\bar{x}=38.76$ ) respectively. From the test of norm calculated, access to ICT by respondents was high.

On the frequency of ICT use by respondents, Federal University of Oye-Ekiti shows the highest ( $\bar{x}=55.25$ ), University of Lagos had a ( $\bar{x}=51.87$ ), while the least mean score recorded by Tai Solarin University of Education ( $\bar{x}=41.38$ ), Adekunle Ajasin University ( $\bar{x}=42.50$ ) and Federal University of Akure ( $\bar{x}=42.84$ ) respectively. The test of norm for ICT use indicated moderate use of ICT in public university libraries.

This result implies is that library personnel from the public university library in southwestern Nigeria are highly enterprising. It can be seen from the result that task performance is relatively high across all the university libraries studied. Even though the University of Lagos has the lowest mean score of ( $\bar{x}=216.40$ )SD17.76, yet the mean score is still high. The table equally revealed that ICT skills of library personnel across the university libraries in southwestern Nigeria are equally high. The overall mean score of ICT skills is ( $\bar{x}=80.91$ ) SD 19.20. From the table, it can be seen that the high ICT recorded cut across all the university libraries studied. This is indicating that library personnel from southwestern Nigeria possessed relevant ICT skills that could affect their task performance positively.

The overall mean score for access to ICT by library personnel is ( $\bar{x}=43.58$ ) SD12.17. This high level of access cut across all the libraries studied. This implies that the university management and the library management have been providing the needed ICT facilities for personnel to carry out effective and efficient task performance in the university libraries studied. It equally reflects that library personnel had easy accessibility to ICT facilities which impacted positively on their skills and use. The table indicates that the use of ICT by library personnel across all the university libraries was moderate. Some factors might be responsible for this.

#### **4.6 Discussion of the findings**

This section discusses major findings in line with the research questions and hypotheses. Findings on demographic variables of respondents revealed that the age range of majority of the respondents studied were between 26 and 35 years which fall within the category of younger library personnel. The results equally indicated that majority of the library personnel studied were male. Majority of library personnel studied were married. Those who had Master in

Library and Information Studies (MLS) were also in the majority while those who had between 1 and 5 years experience constituted a majority.

### **Level of ICT skills of library personnel**

Finding from this study revealed that the level of ICT skills possessed by library personnel in public university libraries studied were high. This implies that library professionals in public universities possessed high ICT skills for manipulating hard and software for effective task performance in the public university libraries in southwestern Nigeria. This finding is in tandem with the results of earlier study by Babu, Vinayagamoorthy and Gopalalakrishnan (2007) that reported high level of ICT skills among librarians in engineering educational institution in Tamil Nadu, though deficiencies were noted in network-based services and digital library services. Satpathy and Maharana (2011) also confirmed high level ICT skills among library professionals in engineering institutions in Orissa, India. This was also affirmed by Kapondera (2016); MinaTavasoli-Farahi, and Tahamatan (2014), respectively.

The finding from this study however contrasted with that of Oduwole (2006) who reported average skills among librarians in research and university libraries in Nigeria. While Adeyoyin (2009) reported average skills among library staff in Francophone and Anglophones countries, Ansari (2013) reported moderate proficiency in ICT skills among majority of library professionals in Karachi, with differences at the level of individual proficiency. Library professionals require versatility and comprehensive ICT skills to be in right standing in information provision and dissemination in this century. Low skill level and lack of ICT skill is inimical to effectiveness and efficiency in task performance as enumerated by Hussain and Nazim (2014) on the use of ICT in Indian academic libraries reported low skill level is an impediment to ICT use in libraries. Also, Mohammed and Sukkor (2010) reported lack of ICT-related knowledge, skills and lack of confidence in the use of ICT among library professionals in Calicut University libraries in Kerala. Average or inadequate or lack of ICT skills by library personnel is inimical and detrimental to efficient flow of work and may jeopardise users satisfaction.

Further findings showed that word processing skills, ability to download and save document, ability to format and process document which are indicators of the constructs computing skills had high weighted mean score which is above average. This implies that respondents have good skills in these areas which can be leveraged conveniently in carrying out the responsibilities of information generation and dissemination. Ability to print, edit, scan,

upload and use power point as indicators of computing skills had weighted mean score that is below average which indicates that these skills are inadequate and respondents needs to improved their ICT skills in this areas. This is in consonance with Anyaoku(2012)which reported word processing skills and power point presentation as core requirement by library personnel for information processing, provision and dissemination.

Ability to browse the Internet, identify information sources and evaluation skills, engage in online discussion as indicators of the construct of Internet navigation skills of respondents were above the average mean score. The finding implied that respondents possessed these skills which are required daily in library operations. The finding corroborates with Nwokedi, Nwokedi, Amkpa and Ogugua (2017) which reported effective navigation of the Internet for information retrievals by library personnel. Ability to use different search engine to navigate the Internet and web creation skills were found to be below the weighted mean for Internet navigation skills. Respondents must increase in their knowledge and skill on the use of different search engines for maximum benefits. This was corroborated by the findings of Khiste, Veer, and Maskee (2011) which reported that library personnel require sufficient knowledge and skill to make maximum use of the Internet.

Ability to install and activate antivirus devices, e-mail management skills and ability to use OCLC were above the average mean score which is an indication that respondents had skills that can be deployed to manage information provision in the library. However, trouble shooting skills, database creation and management skills, which are indicators of computing management skills, were below average. This implies that respondents need to increase their capacity in these areas for smooth task performance to take place. Computing and management skills which consist of trouble shooting, database creation and management skills and ability to install and maintain antivirus are daily requirements skills for effective library services. Possession of trouble shooting skills is highly required in the library to preserve the life span of computers and ameliorate shortages in human resources demand in the ICT environment. Enhancement of library personnel capacity to trouble shoot and resolve problems as soon as it manifests will save time and promote the quality of services rendered. This was affirmed by Ahmad and Yaseen (2009) who reported that librarians must be conversant with any problem that might arise while using ICTs and be able to resolve them promptly.

Information storage and preservation skills, ability to use web 2.0 in library services had weighted mean score below average. This implies that respondents need to increase competence in these areas to ensure effective service delivery. Some of the ICT skills that library personnel

need to upgrade as a result of the findings in this investigation are web page creation and management skills, as well as database creation and upgrading skills.

Other important ICT skills requisition in which library personnel must demonstrate vibrancy include Internet and web searching strategies, networking, ability to use web 2.0 (Face book, Twitter, Blog Podcast, Wikis) synonymously refer to as socio networking tools in library practice is highly required for effective service delivery. It enables the library personnel to take the library to the users. This was affirmed by Khan (2013), who reported that web 2.0 is required in this present scenario to connect with library users. Also, Anyaoku (2012) reported that web 2.0 and digitisation skills are important for effective performance of duties and responsibilities in the university libraries.

### **Level and ease of ICT access by library personnel**

The result of the data analysed revealed high access to ICT facilities which might be due to various TETFUND intervention in the development of the university libraries. This finding implies that library personnel have enough ICT facilities at their disposal to execute various tasks in the library. This finding contrasted with most findings in literature such as Ademodi and Adepoju (2009) in Ondo State, which revealed that the level of access provided by libraries to library personnel was low. Also, Rosenberg (2005) reported that even though e-resources were available in most universities in libraries in Africa, facilities were poor. Khan and Bhati (2012) reported lacked access to ICT infrastructures by most libraries in developing countries. Ansari (2013) revealed that facilities and infrastructure were poor in most of the libraries studied in Karachi. Bello, Emmanuel and Busari (2013), in a study on Nigerian university libraries, reported that ICT was available but not accessible. Olayemi, Umar, Yemi-Peters, Sokari (2015) in a study at Bayero University equally reported that inadequate access to ICT prevented ICT use in the serial sections of the university libraries studied. This is reflection that access is important to personnel in the library.

Access to ICT facilitates use, as no use is possible without access. Lack of access either to computer, the Internet and other facilities are hindrance to effective use of ICT in performing necessary tasks in the library. ICT facilities considered to be very easily accessible to library professionals include computer, the Internet, printer, photocopier, telephone/iPad/smartphone, scanner, television, multimedia projector, and digital camera, while video conferencing, fax machine and others were not easily accessible. This is in contrast with Wanagenya and George (2016) who reported that fax machine, printers, telephone, telex-fax were the only ICT

accessible to staff while only senior staff had access to personal computer. Lack of access to necessary ICT facilities in the library would render personnel less effective, hinder workflow, limit achievement of overall library goals. It is capable of demotivating personnel and this can culminate into less commitment by staff. Various mitigating factors affect ICT access, this was buttressed by Adetimirin (2012) who reported lack of access as impediment to ICT use by undergraduate students. Amkpa(2009) reported that poor funding impacted negatively on access which affected library function. Philip (2004) identified lack of connectivity, old and non-compliant equipment, lack of appropriate software, financial barrier and incompetence on the part of personnel as barriers to access to ICT.

### **Level and frequency of ICT use by library personnel**

On level of ICT use by library personnel, the results of the data analysed indicated moderate use of ICT by library personnel in the public university libraries. This simply translates to the fact that ICT facilities were not maximally used by library personnel in public university libraries in southwestern Nigeria. This perhaps might be as a result lack of access to ICT facilities as well as deficiency in ICT skills of library personnel as reported by Bello, Emmanuel and Busari(2013). This implies that, inadequate use of ICT facilities would prevent maximum performance by library personnel leading to lack of tardiness in the execution of tasks and prevention of smooth flow of work in the library, thereby hindering effective delivery of services. This result contrasted with Magara (2002) findings on the use of ICT in Uganda libraries which revealed low level of ICT use among library professionals. Nath and Bahl and Kumar (2007) reported low level of ICT knowledge and skills and, generally, lack of training among library professionals in Chandigarh City libraries. Twari and Sahoo (2013) reported that ICT was not well developed in university libraries in Rajasthan which hindered its use. Krubu and Osawaru (2011) reported partial application of ICT in carrying out library functions at the University of Benin and Ben Idahosa University in Nigeria. The study further revealed the use of ICT three units of the library to carry out its functions. Non use of ICT for acquisition, organisation, processing and dissemination in all the units of the library will impinge on its effectiveness as reported by Salam and Bamigboye (2011).

Further findings from the study revealed that computer/laptop, the Internet, telephone/iPad/ smartphone, printer, photocopier CD/DVD and digital television were used daily by library personnel. Digital camera, multimedia projector, videoconferencing were the least frequently used ICT among library personnel. The findings are in consonance with Maceli and Burke (2016)

which identified e-mail, web browsers, library catalog, searching tools and printers as the most commonly used ICT facilities in libraries in the USA. Mabawonku, Idowu, Oduwole, and Ogungbemi (2010) identified CD-ROM and email as the mostly used ICT by libraries in Nigeria. Sivakumaren, Geetha and Jeyaprakesh (2011) reported that the most frequently used ICT facilities by librarians in India were computer, laptops, printers, scanners, and photocopier. The non-use of digital camera, multimedia projector and video conferencing may be due to lack of collaboration among teaching faculty and the library on one hand and non-use of ICT in teaching by lecturers. Non-use of barcode scanner(52%) by library personnel can be as a result of its limitation to technical section of the library.

The modus operandi in the library at present requires the use of ICT for line, routine and administrative functions. ICT use in libraries would enable creativity among library professionals which would result in the development of new products and services in the university libraries. Comprehensive use of ICT facilitates easy exchange of information between the library practitioners and users. The use of ICT in executing various tasks in the library will make library personnel smarter and autonomous, while non-use of ICT to carry out library functions is inimical to the survival of libraries today and will also lower individual performances resulting in ineffectiveness.

### **Level of task performance among librarians in public university libraries**

Finding from the study revealed a high level of task performance among librarians. High task performance among librarians is premised on high job knowledge, job skills, adequate planning and supervision, adaptability skills, quality service delivery, quantifiable outcome, communicative competence, creative skills and timelines supported by good management supervision.

This finding is in tandem with the few outcome in research literature which described the state of task performance prevalent in libraries. While Maripaz, Ombra and Osman (2013) found task performance in government institutions in central Mindanao Philippine to be satisfactory, Aboyade's (2013) reported that job performance among library professionals in federal universities in Nigeria was high. This state of performance resulted from good management style, increase/regular payment of wages and salaries, use of appropriate incentives, and ability and personality factor of library professionals. Other findings such as Oyewole and Popoola (2013) revealed that job performance among library personnel in colleges of education in Nigeria was

average, while Akor (2009) reported low job performance among library personnel in North Central zone of Nigeria.

Library personnel must constantly receive support from library managers so that the goals and objectives of library as one of the units in the university would be achieved. High performance from library personnel requires the deployment of the right infrastructure and facilities. Quaresh, Bashir, Saleem, JavedSadaat and Savdar (2013) reported that lack of supportive environment has the capacity to incapacitate library personnel, thereby influencing performance negatively among university employees in D I Khan. One of the best ways to keep and retain high performance of personnel is for individual personnel to keep his/her skills current and competitive. This will boost self confidence and effectiveness which will increase the value and worth of such personnel. Possession of job knowledge, skills, and ability to produce quality and quantifiable output of work are indicators of high task performance of library personnel on the job. Since highly performing employees are the assets of any organisation, both university and library managements must uphold this high level of performance among their staff because highly performing staff are the cornerstone of success in any organisation.

The high task performance recorded in this study could be attributed to possession of high job knowledge recorded in the study. This is in consonance with Bawa (2017), which regarded domain knowledge as very essential for LIS supervisors responsible for controlling and directing others. Ability to demonstrate relevant skills and ability of library personnel to maintain skills in current tools and technology necessary to complete assigned tasks yielded high mean score rating when both the supervisors' and the self ratings of respondents were considered. This indicates the priority placed on ICT in carrying out several tasks needed to information provision and dissemination to users in university libraries. Being able to accomplish acceptable volume of work under normal situation had the highest response rate from respondents among all items under task quantity. Librarians are expected to demonstrate effectiveness in handling professional responsibilities. Inputs of librarians in cataloguing and classification are quantified on daily basis to determine personnel performance and efficiency on the job. Librarians not only produce acceptable volumes of work the quality of their outputs from the results of data collected indicated that they possess the capacity to multitask effectively, and meet acceptable standard.

Adequate planning and organisation, coupled with effective supervision, yielded high responses from both self and supervisors' ratings of performance, coupled with the accessibility to ICT tools needed to carry out effective tasks in university libraries. Ability to communicate orally and in writing had the highest means score among the items used to determine

communication as an indicator of effective and efficient task performance by library personnel. Ability to promptly execute tasks, to manage time well, and ability to complete allocated tasks on schedule are aided by accessibility to necessary infrastructure. In affirmation to this findings, Ben Yousef, Martins and Nessrine (2012) admitted that appropriate facilities would propel librarians desire to achieve optimum performance. Likewise, the availability of tools and resources would enable librarians to practise with ICT which at the same time is capable of spurring them to achieve optimal performance in their chosen fields.

### **Task performance among para-professionals in the public university libraries**

Result from this study indicated high task performance among library officers in public university libraries in southwestern, Nigeria. This implies that library officers possessed high job knowledge, job skills, good communication skills, creativity and adaptability skills to be able to deliver on their mandate. It equally implies that library officers in public university libraries delivered quantifiably and qualitatively assigned tasks which enable the provision of satisfactory services that meet clients' needs. From the result, library officers are well skilled in their area of operations. They possess the capability to take over more job responsibilities. They are involved in the supervision of subordinate staff. Their involvement in planning and organising job schedule is essential. Ability of library personnel to communicate job expectation to subordinate would enhance task performance. The high task performance found among library officers is an indicator that more job responsibilities are being shifted from librarian to library officers.

This finding was supported by Saka and Salmon, (2014) who reported high task performance among library officers in government and private university libraries in Nigeria. Contrarily, Nwosu, Ugwoegbu and Okeke (2013) study also revealed moderate task performance among library professionals in southeast, Nigeria. James, Shamchuck, Koch (2015) reported that the differences in traditional duties of librarians and library officers are getting dim by the day which implies that tasks performed by library officers in public university libraries are dynamic and not static. To buttress this finding, Iwu (2011) reported that library officers performed duties that cut across all the areas in technical services, as well as in electronic resources management.

### **Relationship among demographics and ICT skills of library personnel in public universities**

This study revealed that there is significant relationship among demographics (gender, age, marital status, educational status, work experience, job status, income) and possession of ICT skills of library personnel. This implies that demographics of individual personnel have implication on their ICT skills. This finding buttressed Angeline and Swaroop-Rani (2015) which

reported a significant relationship between respondents' age, education, experience and technology skills among information professionals in Arts and Colleges in Trichy and Tanjore, District.

Results obtained from this study might also be due to the emphasis placed on ICT use by professionals in the library, which requires them to use ICT at all costs. Library personnel cannot hide from using ICT because technology has pervaded every area of library operations. This implies that, library personnel are expected to possess the necessary skills that would enable them use ICT to do their jobs in spite of their demographics. The findings however negate the result of Uwaifo (2009) which alleged that academic qualifications did not determine ease of use of digitalised libraries in Nigeria. On the basis of the outcome from this study, the conceptual model which established relationship between demographics and ICT skills by respondents is upheld.

Demographics of library personnel have the capacity to interfere in their quest to acquire relevant ICT skills. Education status enables individuals to easily developed adaptability skills easily, prompt the possession of ICT skill, as well as flexibility in the use of ICT facilities. This indicates the knowledge repertoire of staff which can be useful in advancing the objectives of the university library by being creative and adaptable to changes in technological environment. Likewise, acquisition of relevant experience will promote task performance of personnel and enables them to carryout assigned tasks with speed and accuracy.

### **Relationship among demographics and ICT use by library personnel in public universities**

The outcome of this study indicated significant relationship among demographics (gender, age, marital status, educational status, work experience, job status, and level of income) and ICT use of brary personnel in university libraries. This means that the demographics of the individual personnel have relevance with ICT use. The findings, however, is in consonance with Edom (2010) who reported that gender and experience had significant influence on academic staff use of ICT in Evan Ewerem University. Equally, Owolabi (2013) reported significant relationship between age, educational level and work experience among university library personnel in Oyo State. This finding however contrasted with the study of Ansari (2013) which reported that gender is not significantly related to ICT proficiency among library personnel in Karachi, Pakistan. Demography plays crucial role in ICT use.

Majorly, older library personnel sometimes shy away from using ICT to carry out job responsibilities while younger personnel are dominant user of ICT. Educational status influence ICT use. This is because job assignments are based on educational status. Those who have higher

educational status are challenged by responsibilities to use ICT. Education helps to overcome the barrier of telecom language, while job status equally helps to overcome the barrier of cost of equipment. On the basis of the outcome of this study, the conceptual model which indicates relationship between demographics and ICT use of respondents is upheld.

### **Relative contribution of demographics ICT skills, access and use on task performance of library personnel in public universities**

This study revealed relative contribution of demographics (age, marital status, educational status, work experience) ICT skills, access and use to task performance of library personnel in public university libraries in southwestern Nigeria. This means that each of the independent variable has effect individually on the dependent variable (task performance). Findings from this study corroborates other findings in literature. Narges, Abdulahi and Bolong (2011) findings on a study which involved university executives in Malaysia, showed that increase in age enables employees to perform better. Segir and Marcano (2013) found significant relationship between age, civil status, educational attainment and task performance of bank managers. Quareshi, Bashir, Saleem, Javed, Saadat and Safdar (2013) reported high correlation between age, education, experience and performance of employees among university employees in D I Khan. Ng and Feldman (2009) also found significant relationship between education and task performance. Mehrad's (2014) study revealed that increase in staff well being predicted high level performance among personnel in public universities in Malaysia.

Findings equally showed gender, professional status and level of income did not have relative effect on task performance library personnel task performance. The finding from this study is supported by Abba, Hammed and Wheed (2011) who reported that gender and marital status do not have significant influence on the performances among telecom supervisors in Pakistan. This is because both male and females have the capacity to respond to ICT use based on their exposure. Mohamad Shaffril, and Uli (2010) reported no significant difference between male and female gender performances in agriculture agencies in Malaysia. While on the level of income, Akinyele and Aina (2007) found no significant effects among employees' compensation and their performances in Nigeria. This means income is not a determinant of task performance. This is because task performance is mandatory and the reason for being employed. However, Bryso, Freeman, Lucifora, Pellizzara and Perotin (2011) associated good income with good performance among workers in Europe. Contrarily, Agba, Mboto and Agba (n.d.) found out that regular wages and other conditions of service influenced performance of workers in Nigeria.

In the same way, ICT skills were found to have significant relative contribution to task performance of library personnel in public university libraries in southwestern Nigeria. This is in line with Ghaeni, Talab, and Tajafari (2012) which found that ICT skills helped in the efficient performance of library operations in India and Iran university libraries. The study revealed significant relative contribution of ICT access to task performance of library personnel in university libraries in the southwestern Nigeria. This is inconsistent with the result obtained by Hussain and Nazim (2015), which revealed that inadequate access to ICT infrastructure hindered effective use of ICT in library practice among India academic lib. This scenario can equally be applicable to library personnel in southwestern Nigeria.

Furthermore, the study equally revealed that ICT use had significant relative correlation with task performance of library personnel in public university libraries in southwestern Nigeria. This might be due to the fact that most libraries are hybrid in nature, and executing tasks involves the combination of both traditional and electronic methods. Omosor (2014) associated improved performance among library personnel with the adoption and use of ICT in cataloguing, classification and other units of the libraries in Delta State. Access to ICT, coupled with possession of high level ICT skills, would promote ICT use and would bring about better performances among library personnel by increasing their efficiency on the job.

### **There is no significant correlation between demographics and task performance of library personnel in university libraries**

The study revealed significant correlation among demographics (age, gender, marital status, work experience, job status and level of income) and task performance of library personnel. Study revealed further that age had significant effect on task performance. This is in consonance with what is obtainable in literature. Sergir and Macarno (2013) in a related study affirmed a relationship between age and performance among managers in the Middle East. Age as a natural process of growth brings with it reduction in mental and physical capacity of individuals. Each level of growth projects different levels of cognition. The differences in cognitive capacity of individuals could be ameliorated by such persons' level of experience and the tacit knowledge that have been accumulated over the years. Workers can be categorised into younger and older adults in the library setting. Both age categories has the capacity to affect the task performance of individual library personnel.

Older adults possess attributes such as experience, knowledge, positive work habit and attitude, punctuality, even-temperedness, respect for authority, stability on the job, ability to

internalise rules better, as enunciated by Tishman, Looy and Bruyere (2012) in a study by NTAR Leadership Centre in the US on how private and public employer are preparing for increase in older workforce. While Grund and Westergard (2005) in the analysis of statistical data of workforce carried out in the USA viewed the younger adults as possessing such attributes as willingness and readiness to learn new things, physical resilience, and ability to grasp and adapt to new technology easily. These imply that all age groups possess characteristics that are beneficial to organisation's success which must be taken into consideration when carrying out personnel selection and retention.

This finding is in tandem with Nasir et al (2011) which revealed significant correlation between gender and task performance among 450 employees in Iran. Mohammed Shafril and Uli (2010) reported significant relationship between task performances and educational status, which means that educational status has positive significant relationship with task performance among agricultural agencies in Malaysia. Previous literature by Ng and Feldman (2009) based on analytical review of literature revealed a positive significant correlation between educational status and task performance. Educational status has been considered very important in job description. While some jobs require mental effort, some only require basic physical capability while some require both. The level of education determines the type of task to be allocated to individuals within the library setting. Highly technical tasks are carried out by librarians who had the educational and the training requisition for such tasks. Library officers who had higher qualifications are equally given complicated tasks to do. Work experience had positive effect on employees' task performance. This is also in consonance with Dokko, Wilk and Rothbard (2008) findings which revealed that years of experience positively had effect on task knowledge and task skills of employees. This means increase in knowledge will results in better performance among library personnel.

Job status and level of income in this study significantly correlated with task performance. This is in line with Ogunleye and Osekita (2016) findings which revealed significant effect of job status on motivation, achievement and work performance. This is an indication that job status is affected by motivation and both can affect task performance of library personnel. Inequitable placement/stagnation of personnel on a job status can lead to withdrawal of effort resulting in docility and non-performance. Since job status is the determiner of salary and other emolument benefits of library personnel, it must be well handled by both the library and the university managements to provide acceptable effect on personnel. Majority of library personnel examined enjoyed moderate income. Income enables library personnel to satisfy both immediate and long

time needs which have positive consequences on their performance. It equally has the capacity of motivating individuals to exact more effort in accomplishing needed task. Warrach and Amen in a study of LIS professionals reported that possession of moderate income would reflect on personal grooming, enables the learning of new skills, and the development of one's career coupled with opportunity for continuing education (2010). Inyang and Inyang (2015) in a study on library staff in the Southeast found out that staff use of computer, Internet, e-mail and power point significantly relate to effectiveness.

**There is no significant correlation between ICT skills and task performance of library personnel in public university libraries**

Findings showed significant correlation between ICT skills and task performance of public university library personnel. The findings from this study affirmed earlier study which found positive correlation between the possession of ICT skills and task performance of library personnel. Chigbu (2007) in his study at Ahmadu Bello University reported that majority of librarians are skilful in using ICT which in effect can influence library effectiveness. Ismail and Abidin (2010) in a study on workers in Malaysian private sector reported that workers' competence has significant influence on workers' performance. Akpan (2014) reported that ICT skills of lecturers enhanced their job efficacy. So also, Venkatesh, Bala and Sykes (2010) findings indicated that ICT enriched employees' job characteristics in services organisation in India. Oguiche (2017) reported that ICT skills competence impacted positively on digitisation, registration, generation of user statistics and on job performance in business organisation in Nigeria. Contrarily, Yaakub and Dazulkifli (2011) reported no relationship between ICT skills and job performance among public service employees in Malaysia..

Also, Nkamnebe, Okeke, Udeme and Nkamnebe (2012) in their study found out that librarians in the southeast were weakly skilled, and this affected their overall performance. Nebeolise in a study on Open University in Nigeria (2013) reported that ICT-compliant librarians assisted Noun libraries to develop. Possession of necessary ICT skills will enable library personnel perform duties and responsibilities smartly and perfectly. Job expectations and deadlines can be communicated and acted upon decisively by personnel. The development of right ICT skills enables feedback to be generated and activated to enhance personnel task performance. The result of this finding confirmed the conceptual model which affirms relationship between ICT skills and task performance.

**There is no significant correlation between ICT access and task performance of library personnel in public university libraries.**

Result indicated significant relationship between access to ICT and task performance of library personnel. Access to ICT is of immense benefit to library personnel, as well the users of the library. This is in tandem with previous literature. Ansari (2013) findings in a study in Karachi reported that access to ICT facilities enabled library to offer quality service. Hussain and Nazim (2015) in a study conducted in India revealed that inadequate access to ICT infrastructure hindered effective use of ICT in library practice. Ansari (2013) reported that even though library personnel in Karachi Pakistan library possessed high competency, they could not use ICT to perform necessary tasks due to inaccessibility of these facilities. Likewise Bello, Emmanuel and Busari in a related study reported lack of access to ICT facilities in Nigerian libraries.

ICT access drives of ICT use, and its implication in improving the workflow in the library cannot be overstated. ICT access enables access to global information resources and assists library personnel in providing efficient service delivery. ICT access promotes ICT use. It enhances the procedure of processing of library materials, by so doing prevents materials from becoming obsolete before it reaches the users. The provision of access to ICT enables circulation activities to be monitored to prevent loss. This study is in line with the conceptual model that showed direct relationship between ICT access and task performance of library personnel.

**There is no significant correlation between ICT use and task performance of library personnel in public universities in southwestern Nigeria.**

The finding revealed significant relationship between ICT use and task performance of library personnel. The use of ICT in the library would result in effective task performance among library personnel, and this would improve individual effectiveness on the job as well. The situation whereby library officers are complacent in the use of ICT will prevent optimum performance in the library. This is because, as middle level manpower, they need to relate with users often. They need to be able to use ICT to provide services that will meet the yearnings of the library users. Non-use of ICT would put the users at a disadvantage.

The result of the findings is in consonance with literature. Priver (2013) in a study conducted in Uganda Christian University found ICT use led to high employees' performance. Equally, Al Challaf (2006) in Kuwait reported that technology has made academic librarian work easier and has increased speed of accomplishing task which also had consequences on individual productivity. Aiyebilehin (2011) in a study conducted in Nigeria reported inadequate

infrastructure, lack of skills, high costs of ICT and erratic power supply were hindrances to effective use of ICT by professionals. He concluded that ICT helped save time, promoted quick delivery of information, has enhanced communication with publishers and vendors in Nigerian libraries. Nwosu, Ugwuogebu and Okeke (2013) in a study conducted in the southeast reported the need to motivate library personnel for improved performance.

The use of ICT, according Haliso (2011), resulted in significant improvement in work measurement, reduction in cost, improved productivity, and improved customers' services which culminated in better services to users among library personnel in southwestern, Nigeria. Finding from Al Challaf(2016) showed that ICT saves time and reduces workload. Library personnel are expected to use ICT and be facilitators of change in an academic environment. ICT adoption and utilisation would impact positively on both individual and organisation's performance. This was buttressed by Nath, Bath and Kumar (2007) findings in Chandigarh city libraries which reported that the ICT use in libraries brought about efficiency as well as effectiveness on the part of the library personnel. Therefore, ICT is very strategic to organisation's performance.

#### **There is no significant joint effect of demographics, ICT skills, access and use on task performance of library personnel in public university libraries**

Findings showed a significant joint contribution among the independent variables: demographics, ICT skills, access and use and task performance of library personnel. This means that the relationship between independent variables and the dependent variables has advantages on each other. Quareshi, Bashir, Saleem, Javed Saadat and Safdar (2013) findings showed high positive correlation and high positive significant impact on age, education, experience, job satisfaction and job performance among D. I. Khan University employees. Al Challaf (2006) findings among librarians in Kuwait revealed that technology has made library work easier, improved speed of task accomplishment, as well as increased productivity. Salam and Bamigboye (2011) in a study conducted among library staff in the University of Agriculture, Abeokuta, finding indicated that ICT has improved efficiency and performance of library staff.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents the summary of findings of the study, conclusion, implications of the study, recommendations, contribution to knowledge and suggestion for further research.

#### 5.2 Summary of the findings

The summary of major findings of the study is presented as follows:

1. The level of ICT skills of library personnel in public universities in southwestern Nigeria was high.
2. The level of ICT access for library personnel in public universities in southwestern Nigeria was high.
3. Computers, Internet, printers, photocopiers, iPad/smartphones were the most easily accessible ICT to the library personnel.
4. The level of ICT use by library personnel in the public universities in southwestern Nigeria was moderate.
5. Computers, Internet, printers, photocopiers, iPad/smartphones were the most frequently used ICT by library personnel in public universities in southwestern Nigeria.
6. The level of task performance of library personnel in public universities in southwestern Nigeria was high.
7. Task performance of librarians in public universities in southwestern Nigeria was high.
8. Task performance of library officers in the public universities in southwestern Nigeria was high.
9. Demographics (age, marital status, educational qualification, work experience and level of income) had significant relative contribution to task performance of library personnel in public universities in southwestern Nigeria except gender, job status and income.
10. Demographics, ICT skills, access and use correlated significantly with task performance of library personnel in public universities in southwestern Nigeria.
11. ICT skills had significant relationship with task performance of library personnel.
12. ICT access had significant relationship with task performance of library personnel.
13. ICT use had significant relationship with task performance of library personnel.
14. Relationship between demographics and ICT skills was significant.
15. Relationship between demographics and ICT use was significant.

16. There was significant joint contribution of demographics, ICT skills, access and use on task performance of library personnel in public university libraries in southwestern Nigeria.

### **5.3 Conclusion**

Task performance is strategic to the achievement of the goals and objectives of the university library. It has been established that task performance is influenced by personnel demographics (gender, age marital status, educational status, work experience, job status and income). The characteristics of individual personnel influence their responses as well as disposition to job duties and responsibilities. This has both positive and negative effects on their performances and productivity in the university libraries.

The relevance of ICT skills to ICT use and task performance among library personnel in the university library of the 21st Century is important for efficiency and effectiveness. ICT skills are prerequisite for effective and efficient task performance, most especially as it affects line functions in the library. Since most line functions in the library are presently ICT-driven, it means the library personnel should possess required ICT skills to operate optimally. Library personnel require ease of access to ICT facilities to carry out effective task performance. Maximum access to ICT facilities will consistently smoothen and ease the execution of job tasks in the library. Access to ICT will promote its use and this will enable library personnel perform optimally. Even though, findings revealed that ICT use by library personnel was moderate, continuous and systematic use of ICT facilities should be encouraged in the library and this will impact positively on task performance of library personnel and enable the library to achieve its goals.

### **5.4 Implications of the findings**

A high level of task performance among library personnel in public university libraries impacts positively on users. Demographics, ICT skills, access, and use significantly contributed to task performance of personnel in public university libraries in southwestern Nigeria. This means factors that predisposed library personnel to high performance must be sustained. Demographics of library personnel must be positively leveraged by library management to ensure that these contribute positively to individual's efficiency. Possession of high ICT skills must be ensured, enhanced and given top priority. Possession of relevant and high level ICT skills by library personnel would bring about effective task performance in the library and this will have positive effects on individual productivity.

The level of access to ICT was high. This implies that the university libraries had adequate ICT facilities, which must be sustained and maintained by both university and library managements to ensure effective task performance in the university libraries. Access is a precursor of ICT use. Access to ICT infrastructure is important to performing task effectively and efficiently in the library. ICT use was found to be moderate among library personnel. This implies that the library personnel are not making adequate use of ICT to carry out their job responsibilities; therefore, management needs to ensure that the use of ICT pervades all sections of the library. This will improve the task performance within the library which will in effect contribute to effectiveness and efficiency of the library. ICT use by library personnel would promote both asynchronous and synchronous communication between the library and its users.

## **5.5 Recommendations**

Based on the findings of this study, the following recommendations were suggested:

1. Library managers must provide conducive environment for library personnel to use ICT to carry out their assigned tasks. All units in the library must be empowered through training and provision of adequate facilities to facilitate smooth working procedures in the university libraries.
2. Library managers must ensure the sustenance of high level ICT skills among library personnel recorded in the study, and ensured that it is improved upon through in-house seminars and workshops. This is because ICT is a constantly evolving phenomenon that requires constant updating so as to continue to enhance library personnel task performance and prevent them from becoming obsolete.
3. High level of ICT skills among library personnel will reduce waste in terms of human and material resources thereby consolidating on gains of technology adoption. Possession of relevant ICT skills will enable library personnel to work effectively and smartly too.
4. Trouble shooting, database creation, preservation, Internet and web search, networking and the use of social networking skills should be enhanced among library personnel.
5. Possession of higher level of ICT skills will promote both synchronous and asynchronous communication with library users and as well make collaboration possible within and across disciplines in the field.
6. It is equally highly imperative for library managers to continue to invest in their employees ICT capacity and capability in order to bring about and sustained effective task performance in the library and information centres.

7. Acquisition of web based creation and management skill and database creation and management skill, should receive the attention of library managers because acquisition of these skills can simplify the process of converting existing collections into the type that can be easily accessed electronically through the library portal round the clock since the process of automating the library is an ongoing activity.
8. Possession of good retrieval skills that will ensure speedy response to users demand is very important to library personnel..
9. In spite of the high task performance by library personnel recorded in this study, library managers must ensure that personnel professional knowledge base is continuously updated through attendance at seminars, workshops and conferences to improve their declarative knowledge and procedural skills.
10. The university management must use ETF fund to train and retrain library personnel. This would improve their capacity and competence on the job. It is expected that training and retraining has the capacity to boost knowledge and skills of library personnel on the job; therefore, constant updating of personnel's knowledge that will enhance their task performance.
11. The university management and the university library must continue to provide incentives that would ensure the maintenance of high task performance identified in this study through prompt payment of salaries and emolument.
12. The demographics of library personnel should be well managed by supervisors, so that these can positively influence library personnel task performance.
13. The university libraries should ensure that the high access to ICT facilities recorded in this study are maintained and improved upon through repairs and rehabilitation. This will facilitate positive task performance among their personnel.

## **5.6 Contribution to Knowledge**

This study would be contributing to knowledge in the following areas by:

- i. ensuring that demographics of library personnel are important factors which must be properly leveraged on by supervisors and management for effective task performance in the library.
- ii. encouraging library managers to provide access to necessary ICT facilities that would facilitate ICT use and enhance positive task performance among the personnel.

- iii. providing the library management with a template for initiating policies on personnel selection, development and management noting the relevance of demographics to task performance in the library.
- iv. sensitizing the university management to provide adequate funding that would enable library personnel acquire appropriate ICT skills that will gingered them to perform assigned tasks well.
- v. validating the theories and research model used in the study as the variables are found to have significant relationship with task performance.

### **5.7 Suggestions for further research**

- 1. This study should be replicated in private university libraries in southwestern Nigeria.
- 2. The scope of the study should be broadened to cover public university libraries in other geo-political zones in Nigeria.
- 3. The study should also be replicated in the colleges of education and the polytechnics in Nigeria.

## REFERENCES

- Abbas, J., Muzaffar, A., Mahmood, H. K., Ramzan M. A, and Ul Hassan Risvi S.S. 2014. Impact of technology on performance of employee: a case study of Allied Bank Ltd Pakistan. *World Applied Sciences Journal* 29.2: 271-276.
- Abass, K. D. 2014. From Techno Illiterate to Techno literate Era. Nigeria Academic librarians in perspectives. *International Journal of Humanities and Social Science* 4.51: 211-224.
- Abbas. Q., Hameed, A. and Waheed, A. 2011. Gender discrimination and its effects on employee performance/productivity. *International Journal of Human and Social Science* 1.15:170-176.
- Abubakar, U. A. 2012. Digital divide as challenge to library and library in Nigeria university: a case study of BBU Bauchi. *Journal of Research and Society* 3.2: 1-12.
- Abdulahi, M. I. 2007. Impact of performance in the public sector: The scientific management theory of W. F. Taylor and its implication for library and information services. *Information Manager* 7. 2: 40-45.
- Abdulahi, Z.M. and Haruna I. 2008. Utilization of information and communication technology for service delivery in university libraries in Adamawa State. *Information and Communication Technology* 5.2: 24 -30.
- Abdeirahman, O.H.2009. The state of ICT implementation and training at the university of Karthoum. Library System (UKLIS). ICAL –Vision and roles of the future academic libraries 77-82.
- Abosedo, S. C. and Akintola, O. A. 2015. Information and Communication Technology facilities' utilization and job performance of Secretaries in Public and Private universities in Ogun State. *International Journal of Managerial Studies and Research (IJMSR)* 3.3: 44-52.
- Aboyade, W. A. 2013. Influence of job motivation, emotional intelligence self concept on job performance among library worker in Nigerian the universities. A PhD seminar paper presented at the Department of Library Archives and Information Studies. University of Ibadan, Education. 125pgs
- Adebayo, E. L. and Adesope, O.M. 2007. Awareness access and usage of information communication technology between female researchers and extensionist. *Int. Journal of Education & Development using Information and Communication Technology (IJEDICT)* 13.1: 85-93.
- Adebowale, T. O., Okiki, O. C. and Yakubu, E. D. 2013. Circulation Activities in Tertiary Institution in Nigeria: A discourse on Circulation Transaction of Yaba College of Technology Library. *Information and Knowledge Management* 3.4: 24-31.
- Adeleke, A.A. and Olorunisola, R. 2010. ICT and library Operations: More on the online cataloguing and classification tools and techniques in Nigerian Libraries. *The Electronic Journal* 28 3: 453-462

- Ademodi, D. T. and Adepoju, E. O. 2009. Computer skill among librarians in academic libraries in Ondo & Ekiti State Nigeria. *Library Philosophy and Practice* 1- 7.
- Adeniran, P. 2011. User satisfaction with academic library services: academic and students perspectives. *International Journal of Librarianship and Information Science* 3.10: 209-216.
- Adeoye, M. O. and Popoola, S. O. 2011. Teaching effectiveness, availability, accessibility and use of library and information resources among teaching staff of School of Nursing in Osun and Oyo State, Nigeria *Library Philosophy and Practice* 1- 20.
- Adepoju, O. A. 2016. Demographic factors affecting ICT utilization by undergraduate students in some selected university in Nigeria. *European Centre for Research Training and Development UK* 2.1: 29-42. [www.e-journal.org](http://www.e-journal.org)
- Adetimirin, A. E. 2009. Use of the internet by information professionals in some selected university libraries in south west, Nigeria. *The Information Technologist. An International Journal of Information and Communication Technology* 6.1: 9-16.
- Adetimirin, A. E. 2012. ICT literacy among undergraduates in Nigerian universities. *Education and Information Technologies* 17: 351-397.
- Adeyinka, T. 2009. Attitudinal correlates of some selected Nigerian librarians towards the use of ICT. *International Journal of Information Science and Management* 7.1: 16-30.
- Adeyinka, T. and Ayeni, C. O. 2006. The Impact of self efficacy and prior computer experience on creativity of new librarians in selected libraries. *Library Philosophy and Practice* 8.2: 1-12.
- Adeyoyin, S. O. 2009. ICT literacy among staff of West African Universities Libraries. Anglo Phone and Franco Phoned Countries. *Electronic Library* 24.5: 694-705.
- Adomi, E. E. and Amie, O.S. 2006. An assessment of computer literacy skills of professionals in Nigerian university libraries. *Library Hi Tech News* 2. 10-14.
- Afolabi, A. F. and Abidoye, J. A. 2011. Integration of Information and Communication Technology in library operations towards effective library service. *Journal of Education and Social Research* 620-628.
- Africa Partnership Forum, 2008. ICT in Africa boosting economic growth and poverty reduction. 10<sup>th</sup> meeting, Tokyo Japan. 1-31.
- Agba, M. O, Mboto, W. H. and Agba, M. S. 2013. Wages and other conditions: A critical assessment of factors in workers performance in Nigeria. *International Journal of Academic research and Social Sciences*. 3.7: 489-505.
- Ahmad, P and Yassen, M. 2009. The role of the library and information science professionals as Managers. A comparative Analysis. *Electronic Journals of Academic Librarianship* 10.3: 1-10
- Aina, A. J. Aiyegunle, S. A. ,Ogungbo, W. O. Aribatise, H. O. 2010. *International Journal of Creativity and Technical Development* 2.1-3: 51-60

- Aiyebilehin, C. O. 2005. Computer skills competencies among academic librarians: an imperative for effective computerization of Nigerian Libraries. *A journal of library and information Science* 11.1&3: 97-106.
- Ajayi, S. A., Sorunke, O. A. and Akinola, A.O. (2013) Factors influencing the use of information and communication, technology (ICT) by library personnel in College libraries in Osun and Oyo State, Nigeria. *Information Technologists* 10.1: 143-156.
- Ajidahun, C. O. 2004. The state of information technology in Nigerian university libraries. *A journal of Library and Information Science* 11.2. 22-29.
- Akanbi, P. A. n.d. Influence of extrinsic and intrinsic motivation on employees performance. Paper 1-14.
- Akande, S. O. 2014. ICT skills of library personnel in changing digital environment A study of academic libraries in Oyo State. *Information Technologists* 11.1: 76-81.
- Akpan-Atata, E. and Enyene E. T. 2014. Awareness, availability, and utilization of ICT facilities for effective library service delivery in academic libraries in Nigeria. *Journal of Research in Education and Society* 5.3: 10-15.
- Akintoye, I. R. 2000. The place of financial management in personnel psychology. A paper presented at part of personnel psychology guest lecture series. Department of Guidance and Counselling, University of Ibadan, Nigeria.
- Akinyele, B, N, and Aina K. S. 2007. Effect of compensation on employee performance. 148-156.
- Akor, P. U. 2009. Influence of library leadership on the job performance of professional librarians in North Central Zone. An unpublished Ph D Thesis of University of Nigeria Nsukka.
- Akpomu, M. and Ordu, P. 2009. Modern office technology and the secretary productivity in private business organisation. *African Journal of Business Management*. 3.8: 333-339.
- Akpotor, J. 2009. Promotion of gender equality and women empowerment - *A millennium Development Goals*. *Gender & Behaviour* 7.2: 2504-2516.
- Alazzam, A.O., Bakar, A.R., Hamza, R. and Asimiran, S. (2012) Demographic characteristics, educational background and supporting factors on ICT readiness of technical and vocational teachers in Malaysia. *International Education*. 5.6: 229-243
- Alemneh, D. G. 2006. Developing ICT infrastructure for Africa: Overview of barriers to harnessing the full power of the internet globalisation. *Journal of Education for Library and Information Science*. 47 (1) 1-14. Retrieved 9/12/2014.
- Allen, T. D. 2006. Rewarding good citizens: The relationship between, behaviour gender and organisation rewards. *Journal of Applied Psychology* 36. 120-143.
- Ali, A. 2013. Significance of human resources management in organisation linking global practices with local perspectives. *Journal of Arts, Science and Commerce* IV.1: 78-87

- Apulu, I. and Latham, A. 2011. An evaluation of ICT: Two case study examples. *International Business Research* 4.3: 3-9.
- Al Qallaf, C. L. 2006. Librarians and Technology in Academic and Research Libraries in Kuwait: Perceptions Performance Workload and rewards effects. *Libri* 56. 168-179.
- Amkpa, S. A. and Abba, T. 2009. Factors inhibiting the implementation of information and communication technologies (ICTs) in Nigerian universities libraries. *An International Journal of Information and Communication Technology* 6.1: 33-43.
- Amusa, O. I. Iyoro, A. O. and Ajani, F. O. 2013. Work environment and job performance of librarians in the public universities in South-west, Nigeria. *International Journal of library and Information Science* 5.11: 457-461.
- Angeline, X. M. and Swaroop Rani, B. S. 2015. ICT literacy among library professionals working in selected Arts and colleges in Trichy and Tanjore District: Affiliated to Bharathidasan University. *International Journal of Academic Library and Information Science* 3.5: 145-148.
- Ansari, M. 2013. ICT skills proficiency of library professionals: A case study of the Universities of Karachi, Pakistan. *An international Electronic Journal* 1-13. URL: [www.ck.us/clei/c\\_e136\\_Chinese\\_Librarianship.ansaripdf](http://www.ck.us/clei/c_e136_Chinese_Librarianship.ansaripdf)
- Anunobi, C. V., Nwakwo, O. P., Oga, M. and Benard, I. I. 2011. The adoption of ICT for library and information services at the federal university libraries in the south eastern Nigeria. A case study of Federal University of Technology, Owerri. (FUTO) Selected Works 1-11.
- Annunobi, C. V., Mwakwuo, O. P. and Ezejiolor, V. O. 2010. Serials acquisition problems in Nigerian Federal university libraries. *International Journal of Library and Science*. 2.7: 137-142.
- Anunobi, C. V. and Edoaka, B. E. 2010. Use of ICT facilities for serial functions in Southern Nigeria Federal University Libraries. *Library Philosophy and Practice*. 1-11
- Anyaoku, E. N. and Ajala, E. B. 2003. Staff development to meet the challenges of academic status for librarians working in Nigerian universities. *Journal of Library and Information Science Review* 21.1:29-38.
- Anyaoku, E. N. 2012. Computer skills set of librarians in Nigeria: Confronting the stereotype. *Annals of Library and Information Studies* 59: 128-134.
- Anyira, I. E. 2011. One among twelve: How library professionals constitute a serious challenge to the provision of library services in the 21<sup>st</sup> century. *Library Philosophy and Practice* -537.
- Asamu, F. F. 2014. Impact of communication on workers performance in selected organisation in Lagos, Nigeria. *IOSR Journal of Humanities and Social Science IOSR-JHSS* 19.8: 75-82.
- Azman, I., Chin Sieng, L.L., Ajis M. N., Dollar N. F. and Boerhannoeddin A. 2009. Relationship between supervisors role and job performance in the workplace training programme. *Tomii LVI Stijjeconomice* 238-251

- Babu, B. R., Vinayagamoorthy, P. and Gopalakrishnan, S. 2007. ICTS skills among librarians in engineering education institutions in Tamil Nadu. *DESIDOC Bulletin of Information Technology* 27. 6: 55-64.
- Bhangu, A K. 2013. Use of Information and Communication in academic libraries. *International Journal of Scientific Engineering and Technology*. 2. 11: 11262-1167.
- Bahnabhai, B. N. and Patel, M. G. 2013. Role of human resources development in Library Organisation. Research Paper. *International Journal of Scientific Paper*. 2.2: 227-228.
- Barnes, H. Smeaton, D. and Taylor, R. 2009. An ageing workforce: The employer perspectives. A report published by Institute of Employment Studies.UK. 138p.
- Bakan, I. and Buyukbese, T. 2013. The relationship between employee and income level. *International Journal of Business and Social Sciences*. 4.7:18-25.
- Bamigboye, O. B., Buraimo, O. K. and Ajani, F. A. 2008. Job satisfaction and performance of academic librarian in Nigerian University in the south west. *The Information Technologist: An International Journal of Information and Communication Technology* 5.2: 91-100.
- Baro, E. E. 2011. A critical examination of information and communication technology policies: Effects on Library Services in Nigeria. *Library Philosophy and Practice e-journal* 1- 15.
- Baro, E. E. and Eze, M. E. 2015. An investigation into self perception of ICT related information literacy. *Article* 9.2: 198-209.
- Bardesi, H. J. 2016. Factors affecting demand for internet access in Saudi Arabia. *Euroasian Journal of Business and Management* 4.3: 29-38.
- Batool, S. H. and Ameen, K. 2010. Status of technological competence: A case study of Universities Librarians. *Library Philosophy and Practice* 1-9.
- Bello, M. A. and Mansor, Y. 2012. Duties and job performance factors. *Library Philosophy and Practice (e-journal)*. 829. 1-12.
- Bello, I. O., Emmanuel, S. O. and Busari, I. T. 2013. Availability and Accessibility to ICT facilities by librarians in some selected Nigeria universities. *International Research: Journal of library and Information Science* 3.3: 517-531.
- Borman, W. C. and Motowidlo, S. J. 1993. *Expanding the criterion domain to include elements of contextual performance*. In N. Schmitt & W C. Borman and Associates (Eds) *Personnel selection in Organisation* San Francisco, CA Jossey-Bass Publishers. pp 71-98.
- Bonner, S. E. and Sprinkle, G. B. 2002. The effect of monetary incentives on effort and task performance: theories, evidence and a framework for research. *Accounting Organisation and Society*. 27. 303-375.
- Bryson, A., Freeman, R., Lucifora, C., Pellizzari, M. and Perotin, V. 2011. Paying for performance: Incentive Pay scheme and employee financial participation. Centre for

- Economics performance. Employee Ownership Blog, Legislative Highlight Draft.Dicussion Paper. 1-22.
- Buarki, H., Hepworth, M. and Murray, 2011. ICT skills and employability needs at the Lis programme. Kuwait a literature review.*New Library World* 112. 11/12: 409-512.
- Buddhpriya, S. 2009. Work family Challenges and their impact on career decisions: A study of Indian women professionals. *Vikalpa*34.1: 31-45.
- Butt, K. Quitab, S. and Mahmood, K. 2011. Access and use of the internet in libraries of Lahire in Pakistan. *Chinnese Librarianship: An International Electronic Journal*, 31 URL [http //www.iclc.us/c/eij/c131BQM.pdf](http://www.iclc.us/c/eij/c131BQM.pdf)
- Bystrom, K. and Llyod A. 2012. Practice theory and work task performance: How Are they related and how can they contribute to a study on information practices*ASIST*. 28-33.
- Campbell, J. P. 1990. *Modelling performance prediction problem in industrial and organisational psychology*. In M.D. Dunnette& L.M. Houghs (Ed.) *Handbook of Industrial and organisation psychology*. Palo Alto: Consulting Psychologists Press 1. 687-732.
- Campbell, J. P. 1999. *The definition and measurement of performance in the new age*. In D. R. Ilgen& E. D.Pulkalos (Ed). *The changing nature of performance. Implication for staffing, motivation and development*. San Francisco: Jossey – Bass. 258-299.
- Campbell, J. P., McCloy R. A., Oppler S. H. and Sager C. E. 1993. *A theory of performance*. In N Schmitt and W. C. Borman (Ed) *Personnel selection in organisations* San Fransisco, Jossey Bass pp 35-70.
- Clark, L and Clarion, K.A. P. 2015. After access: Librarians and Digital Empowerment: Building digitally inclusive community. Report. American Library Association. Digital Inclusion Summit.
- Cascio,W. F. 2006. *Managing human resources: productivity, Quality of work life,profits*. Tata McGraw-Hill company. 698pgs.
- Chigbu, N. M. 2007. An evaluation of ICT skills acquisition and use among libraries and librarians of academic libraresin Ahmadu Bello University,and Kaduna Polytechnic.Federal University of Technology, Minna Niger State. Project. School of Science and Science Education.
- Chigbudi, E. D. and Dim, C. L. 2012. Connectivity and accessibility in Nigerian university libraries: A survey of access usage and problems. *Library Philosophy and Practice* 767. 1-15.
- Cole, G. A. 2002. *Personnel and human resources management*. THOMSON Learning. London. 503pgs.
- Connway, (n d) Effects of supervisor or employee relationship on job performance. New York University. Stein hardt Department Applied Psychogically. School of culture, education and human development.

- CULNU, 2014. Resolution of Committee meeting. A bi- annual conference of committee of university librarians of Nigerian universities, Punch Newspaper Nov. 20.
- Curral, L. 2013. *Core Performance Measures*. Michalos A. C. (ed) Encyclopaedia of Quality of Life Research DOI10.1007/978-94-07-0753-5. Springer Science Business Media Dorecht.1-4.
- Dauda, Y. A. and Akingbade, W. A. 2011. Technological change and employee performance in selected manufacturing industry in Lagos State. *International Journal of Business and Social Science*.1.5: 32-43.
- De Koning, J. and Gelderblom, A. 2006. ICT and older workers: no wrinkled relationship. *International Journal of Manpower* 27.5: 467-490.
- Der-Wolf, L., Marek, M. G. and Marcinek, M. 2005. Quality of academic libraries – funding bodies, librarians and users perspectives. A common project of Polish Libraries. *71st IFLA General Conference and Council* August 2005. 14-18, Oslo, Norway: IFLA. 1.
- Dhanavandan, S. Esmail, S. M. and Mani, V. 2008. A study of the use of information and communication technology (ICT) tools by librarians. *Library Philosophy and Practice* 1-8.
- Dokko, G, Wilk, S. L. and Rothbard, P. N. 2008. Unpacking prior experience: How career history affects job performance in organisation. *Organisation Science. Article in advance* 1-18.
- Edna, J. M., Gikandi, J. W. and Solomon, K. N. 2014. Determinant of e-services use in higher education. A case of a Kenyan university academic and non-academic staff. *International journal of Education and Research* 2. 5:71-80.
- Edoka, B. and Annunobi, C. V, 2008. Serials Processing activities in Southern University Libraries. *Library Philosophy and Practice* 1- 7.
- Edom, B. O. 2010. Personal characteristics and academic staff utilisation of ICT in Evan Ewerem University, Owerri, 43.
- Egoeze, F., Misra, S., Akman, I, and Colombo-Palacio, R. 2014. An evaluation of ICT infrastructure and application in Nigeria Universities. *Acta Polytechnic Hungarica* 11.9: 113-129.
- Elger, D. 2013. Theory of Performance. [File://F.\12\0Theoryof P htm](#) 1-6.
- Elnaggar, A. 2007. The status of Omani women in the ICT sector. *International Journal of Education and Development using Information and Communication Technology (IJEDICT)* 3: 4-15.
- Enakrire, R. T. 2019. ICT related training support programmes for information professionals. *Education and Information technologies; New York* 24.6: 3269-3287. DOI:10.1007/s10639-019-09931-1
- Erasto, K. 2013. Impact of information and communication technology on library operations and services delivery in private university in Tazania. <http://hdl.net/123456789/334>

- Elsaadani, M. 2013. Influence of ICT on work productivity in Egyptian industrial organisation. *International Journal of Advance Information Technology* 4.3: 1-11.
- Eze. J. 2012. Cataloguing in the era of ICT: What is happening in public libraries of South-east, Nigeria. *Library Philosophy and Practice*. 1-6.
- Eze, J. U. and Uzoigwe, C. U. 2013. The place of academic libraries in Nigerian university education: contributing to the education for all initiative. *International Journal of Library and Information Science* 5.10: 432-438. <http://www.academicjournal.org/IJLIS>.
- Faculty of Occupational Medicine, 2004. Age and employment. Position paper. Royal College of Physics. Position paper. Royal College of Medicine. 1-3.
- Fidelis, A. 2018. Usage of ICT to support innovative library services in universities: A case of the University of Dar es Salaam Wilbert Chagula library. *University of Dar es Salaam Library Journal Library Journal*. 13,2: 3-17.
- Gargallo Castel, A., Galve-Gorriz, C. 2012. The impact of ICT on productivity. The moderating role of worker :*Quality and strategy* 261-274. [www. Intechopen.com](http://www.intechopen.com)
- Gberevbie, D. E. Osinbajo, A.O. Adeniji, A.A. and Oludayo, O. A. 2014. An empirical Study of gender discrimination and employee performance among academic staff of government universities in Lagos State Nigeria. *International Journal of Human Science and Engineering* 8.1: 101-108.
- Ghaemi Talab, S. M. and Tahjafari, M. 2012. Impact of ICT technology on library staff training: A comparative study.*Annals of library and Information Studies* 59: 07-15.
- Gireesh Kumar, T. K. and Muruli, N. 2013. ICT literacy (ICTL) skills by library professionals in digital era. *Information Management today and tomorrow*. Festschrift 353-366. Retrieved 24/10/2014
- Golub, E. M. 2009. Gender divide in librarianship: past present and future. *Library Student Journal* 2-16. Retrieved 3/04/2013
- Gong, Y., Huang, J. C. and Farh, J. L. (2009) Employee Learning orientation: Transformation Leadership and employee creativity: The mediating role of creativity self efficacy. *Academy of Management Journal* 52.4: 765-778.
- Griffin, M. A., Neal A. and Neale M. 2000. The Contribution of Task performance and Contextual Performance to Effectiveness: Investigating the role of situational Constraints. *Applied Psychology: An International Review* 49.3: 517-533.
- Guipyem, D. A., Guipyem, G.G. and Banwar, D. M. 2019. Information and communication technology accessibility as correlate of e-resources usage among post graduate students in Nigeria. *Journal of Applied Information Science and Technology*. 10.2
- Grund, C. and Westergard, N. 2005. Age structure of the workforce and firm performance. *Discussion Paper*. 1816, 1-20.

- Haddow, G. 2012. Knowledge, skills and attributes for academic reference librarians. *Australian Academic and Research Libraries* 43.3: 231-248. 001:10.1080/00048623.2012.10722279
- Haliso, Y. 2011. Factors affecting information and communication technologies. ICTs use by academic librarians in south western Nigeria. *Library Philosophy and Practice* 1-13.
- Hajar, S. and Asefeh, A. 2008. Computer literacy skills of librarians: A case study of Isfan University Libraries, Iran. *ICOLIS* 51-58.
- Haneefa, M. K. and Abdul Shukkor, C. K. 2010. Information and communication technology literacy among library professionals in Calicut University, Kerala *Desidoc Journal of Library and Information Technology* 30.6: 55-63.
- Hamed, A., Ramzan, M., Zubair, H. M. K., A G. and Arlan, M. (2014). Impact of compensation on employee Performance (Empirical Evidence from Banking Sector of Pakistan. *International Journal of Business and Social Science* 5.2: 1-8.
- Hassan, A. H., Bahaman, A. S., Azri, H., Shaffril, M. and D'Silva, J. L. 2011. Socio demographic Factors Affecting attitude towards ICT usage. *American Journal of Applied Sciences* 8.6: 547 -553.
- Hashim, J. 2008. Learning barriers in adopting ICT among selected working women in Malaysia: Gender in Management. *An International Journal* 23.5: 317-336.
- Hatzell, D. 2006. *Dictionary of management*. Academic (India) Publishers. New Delhi p373.
- Hussain, B. and Nazim, M. 2015. Use of different information and communication technologies in Indian academic libraries. *Library Review* 64.1-2: 1-20. <http://dx.doi.org/10.1108/LR-06-2014-0076> Retrieved 26 January, 2015. Emerald Publishing database. Pre-prints.
- ICT Literacy Panel, 2002. Digital transformation: A framework for ICT Literacy, Princeton NJ *Educational Testing Service*.
- Idhalana, O. U. and Ifidon, E.I. 2019. Information and Communication Technology (ICT) used in the libraries: A plus or minors to Academic libraries in Nigeria. *Summerian Journal of Social Science* .2.6: 68-73.
- Idree, Z, Xinping, X, Shafi, K. Hua, L and Nazeer, A (2015) Effect of salary training and motivation on job performance of employee. *American Journal of Business Economics and Management* 3.2: 55-58.
- Igbinovia, M. O. 2016. Emotional self awareness and information literacy competence as correlates of task performance of academic library personnel. *Library Philosophy and Practice* 1-22
- Igun, S. E. 2006. Human capital for Nigeria libraries in the 21st century. *Library Philosophy and Practice* 8.2: 1- 4.
- \_\_\_\_\_. 2010a. Challenges posed to Nigerian university librarians by the utilization of information and communication technology. *Communicate: Journal of Library & Information Science* 12.1: 1-20.

- \_\_\_\_\_ 2010b. Working experience and librarians' knowledge of information and communication technologies (ICTs) in Nigerian universities. *Library Philosophy and Practice* 1-4.
- Igwebuike E. U. and Agbo A. D. 2017. Improving ICT application to library and information services in special libraries in Nigeria. *Journal of Applied Science*. 10.2:102-110.
- Ikem, J. E. and Ojo R. A. 2003. The challenges of human resources for ICT in Nigerian University Libraries. *Library and information Science Review*. NLISR21.1: 7-17.
- Inyang, A. N. and Inyang, C. L. 2015. Utilisation of information and communication technology (ICT) resources and job effectiveness among library staff in the university of Calabar, Cross Rivers State, Nigeria. *Journal of Education Practice*. 16.6: 102-105.
- Iroaganachi, M.A. and Nikko, C. 2016. Performance assessment models for academic libraries: a case of Covenant University Library example. *Annals of Library and Information Studies*. 63. 7-15.
- Islam, S., Islam, N. 2006. Information and Communication Technology in libraries: A new dimension in librarianship. *Asian Journal of Information Technology*. 5.8: 809-817.
- \_\_\_\_\_ 2007. Use of ICT in Libraries: An empirical study of selected libraries in Bangladesh. *Library Philosophy and Practice*. 1-8.
- Ismail, J., Musa, A., Ladisma, M. A. and Shari, S. 2011. The performance of academic libraries: A case study of Research University (RUS) in Malaysia. *Global Journal of Human and Social Sciences* 11.8: 1-6.
- Ismail, R. and Abidin, S. Z. 2010. Impact of workers competence on their performance in Malaysian private service sector. *Business and Economic Horizons*. 2.2: 25-36.
- Iwe, J. I. 2000. Automating library processes in the University of Calabar. *Information Development*. 16.1: 24-29.
- 2005. Enhancing women's productivity in the library and information sector in Nigeria. *Electronic Library*. 23.3: 319-332.
- Iwu, J. J. 2011. Effective motivation of paraprofessional staff in academic libraries in Nigeria. *Library Philosophy and Practice* <http://unlib.unl.edu/LPP/1-9>.
- Iqbal M. and Khan A. 2017. Examining the ICT skills of university librarians in a developing country a study of University of Punjab, Lahore, Pakistan. *Library Philosophy and Practice (e-journal)* 1639 1-18.
- Jackson, S. E. and Schuler, R. S. 2002. *Managing Individual Performance: A strategic Perspective Psychological Management of Individual Performance*. S. Sonnentag (Ed). John Willy and Sons. 18: 371-390.
- James, B. Effects of Information and communication technology on secretaries performance in contemporary organisation in Bayelsa State. *Information Knowledge Management* 3.5 87-93.

- James, N, Shamchuk, L., and Koch, K. 2015. Changing roles of librarians and library officers and technicians. Partnership: *The Canadian Journal of Library and Information Practice and Research* 10 (2) <http://doi.10.21083/partnership.v10i2.3333>.
- Jibia, M. S., Mubaraka, C. M. and Jirgi, I. M. 2013. Use of information Communication Technology (ICTS) among library staff in selected institution library of Katsina State, Nigeria. *Information and Knowledge management* 3. 6. 7-12.
- Jordan, H. A. and Zitek, E. M. 2012. Marital bias in perception of employees. Basic and Applied Psychology. Psychology Press. Taylor and Francis Grp. 474-481. DOI 10.1080/01973533.2012.711687.
- Kahya, E. 2007. The effect of job characteristics and working conditions on job performance. *Journal of Industrial Ergonomics* 37. 515-523.
- Kamal, Y. and Hamif, F. 2009. Pay and job satisfaction: A comparative analysis of different Pakistani Commercial Bank. In 9<sup>th</sup> National Research Conference. 1-21.
- Kamila, K. 2013. Managerial change for the survival of library and information centres in information and communication technology era. *Change Management Strategies ICAL* 314-320.
- Kapondera, S. K. 2016. The use and impact of information and communication technology on Malawian libraries: A case study of Mzuzu University Libraries Proceedings 8-10 February 3<sup>rd</sup> International Conference on Education and Social Sciences. Istanbul Turkey. 37-740.
- Katz, R. 2007. Testing Information Literacy in Digital Environment. ETS's skills assessment. *Information Technology and libraries* 1. 1-3.
- Katz, I. R. and Macklin, A. S. 2005. Information and Communication Technology (ICT) literacy integration and assessment in Higher education. *Systemic Cybernetics and Informatics* 5.4:50-55.
- Kenneth, C.K.S. and Hossain, L. 2006. Network Structure, ICT use and Performance Attitudes of Knowledge workers. 1-7.
- Khan, I. 2013. Library, librarians and library services in Web 2.0 environment. *International Journal of Digital Library Services*. 3.4: 14-36.
- Khan, S. A. and Bhatti, R. 2012. A review of problems and challenges of library professionals in Developing countries including Pakistan. *Library Philosophy and Practice e-journal* 1-7
- Khiste, G. Veer, D. K. and Maske, D. B. (2011). Roles of search engines at a glance. *International Journal of Information Dissemination and Technology* 1.2: 86-91
- Kimmo, P. 2012. The impact of technologies on individual workers productivity. 1-5. <http://urn.fi/URN:NBN:fialto-2001209032893>.
- Knolding, M. and Kroa, V. 2007. E- Skills the key to employment and inclusion in Europe. *White paper Microsoft*. [www.IDC.Com](http://www.IDC.Com)

- Knust, R. B. C., Knust, M. S. B. and Antwi, UDS I. K. 2013. Studies on motivation and performance of Librarian. *Library Philosophy and Practice e-journal* Paper 911. 1-25.
- Koellinger, P. 2006. Impact of ICT on corporate and employment dynamics. *Paper/Report e-business watch*. European Commission.1-33.
- Khoo, C. S.G. 2005a. *Educating Lis professional for Singapore and beyond*. Book chapter In J. Tan et al (Eds) Celebrating 50 years of librarianship in Malaysia and Singapore, Singapore Library Association. Kuala Lumpur. 26-37
- \_\_\_\_\_ 2005b. Competencies for new era librarians and information professionals. Conference/Document ICOL2000 paper 2 Christopher Khoo.pdf. 1-14
- Konapa, K. 2014. Use of electronic resources in university libraries of Tirupathi. An analytical study. *International Journal of Library and Information Science*. 6: 5-13.
- Koopman, L., Bernardis, C. M., Hilderbrandt, V. H., Schaufeli. W.B, Henrica, C. W. and Van de Berk, A. J. 2011. Conceptual framework for individual work performance. A systematic Review, *America College of Occupational and Environmental Research JOEM* 53.8: 856—866.
- Kotteswari, M. and Sharief, S. T. 2014. Job stress and its impact on employees' performance: A study with reference to employee working in BPOS. *Journal of Business Administrative, Research Review* 2.4: 1-25.
- Kotur, B.R. and Anbazhagan, S. 2014. Influence of age and gender on performance. *IOSR Journal of Business and Management (IOSR-JBM)*. 16.5: 97-103. www.iosrjournals.org
- Krubu, D. E. and Osawaru, K. E. 2011. The impact of ICT in Nigeria University libraries. *Library Philosophy and Practice* 1-18.
- Kufal, K. M. and Nadler, J. T. 2014. Marital status: Gender and sexual orientation: Implication for employment hiring decisions. *Psychology of Sexual Orientation and Gender Diversity* 1:3: 270-278.
- Kumar, K. 2013. MBA college librarians' perception of ICT in Andhra Pradesh. *International Journal of Library Science* 5.6: 177-184.
- Kwon, N. and Zweizig, D. L. 2011. Use of community information and communication technologies (ICTs): Explaining the use of community networks with demographic factors, psychological factors and alternative service accessibility. *Library Quarterly* 76.1: 81-106. Retrieved 9/12/2014.
- Kyakulumbe, S.Olobo, M. and Kisenyi, V. 2013. Information and Communication Technology utilisation in Private University in Uganda: Exploring strategies to improve Information: A case of Uganda Christian University. *Technology and Investment* 4.1: 1- 8.
- Leong, J. 2014. Purpose driven learning for library staff. *Australian Library Journal* 63.2: 108-117. <http://dx.doi.org/10.1080/0049670.2014898236>

- Lin C.I.C., Tang, W. H and Kuo, F.Y. 2012. Mommy wants to learn the computer'' How middle aged and elderly women in Taiwan learn ICT through social support. *Adult Education Quarterly* 62.1: 73-90.
- Locke, E. A. and Latham, G.P. 2002. Building a practical useful theory of goal setting and task motivation. *American Psychologist* 57.9: 705-717.
- Longoria, R. G.1997. The relationship between work experience and job knowledge: A theoretical and empirical re-examination.Ph.DDissertation. 55pgs Rice University.[http://hdl handle.net/1911/19180](http://hdl.handle.net/1911/19180)
- Lucifora, C.M.,PellizaraBrysome, A. and Freeman, R.2011. Paying for performance incentives Pay schemes and employees financial participation. Legislative highlight 126.
- Mabawonku, I. M. Idowu, A. O. Oduwole, A. A. and Ogungbemi, J. I 2010. Availability and application of information and communication technology in Nigerian Libraries. *Gateway Library Journal*.13.2: 16-30.
- Maceli M. and Burke J. J. 2016. Technology skills in the work place: Information and Professional Current use and future aspirations. *Information Technology and Libraries* 35.4: 35-62
- Magara, E. 2002. Applications of digital libraries and electronic technologies in developing countries: Practical Experiences in Uganda. *Library Review* 51.5 & 6: 241–255.
- Mallaiah, T. Y. 2009. Management of employee expectations performance and satisfaction in university library: an empirical study. *Annals of Library and Information Studies* 56. 1: 13-21.
- Mamman, E. S. 2015. Utilisation of information and Communication technology ICTs in public libraries services in Nigeria. Ph D Theses of the Department of Library and Information Science University of Nigeria Nzukka.172pgs
- Maripaz, A. M. Ombra, A. I. and Osman,S. 2013. Employability skills and task performance of employees in government sector. *International Journal of Humanities and Social Sciences* 3. 4: 150-162.
- Marchant, T. 1999. Strategies for improving individual performance and job satisfaction at MEADOWNALE HEALTH. *Journal of Management Practice* 2.3: 63-70.
- Maruthi, G. Rajashkara, G. R. and NagarajaShastry, G. M. 2011. Use of information technology in research and development libraries in Karnataka. *A study of 8<sup>th</sup> Int. Caliber University of Goa* 97-105.
- Mathew, K. S. and Baby, M. D. 2012. Developing technological skills for academic librarians: A study based on the universities in Kerala India. *Library Philosophy and Practice* 1-16.
- Mathew, K. S., Baby, M. D. andSreenekha, P. 2011. Professional development of academic library professionals in Kerala. *Education for Information*. IOS Press 215-225.

- Mazumdar, N. R. 2007. Skills for library information professionals working in Borderless library. *5<sup>th</sup> Convention Planner*. 421-429.
- Mehrad A. 2014. The impact of income on academic staff job satisfaction at public research university, Malaysia. *Journal of Education, Health and Community Psychology*. 3.1: 23-27.
- McCloy, R. A. Campbell, J. P. and Cudek, R. 1994. A confirmatory test of a model of performance determiners. *Journal of applied Psychology* 465-505.
- Mehrad, A. 2014. The impact of income on academic staff job satisfaction in public research in universities in Malaysia. *Journal of Educational Health and Community Psychology* 3.2: 23-27.
- Miao, R. T. 2011. Perceived organisational support, job satisfaction, task performance and organisational citizenship behaviour in China. *Institute of Behavioural and Applied Management* 105-127.
- Mishra, L. and Mishra, J. 2009. ICT resources and services in university libraries. *International Journal of Digital Library services* 4.3: 243-250
- Mishra V. K. 2009. Comparative study of essential qualification/experience for library staff, skill required in an ICT environment and syllabus of Lis education in digital era: A case study. *Talent Development and Strategies* 350-355.
- Mohammed, K. H. and Sukkor Abdul, C. K. 2010. ICT literacy among library professionals in Calicut University, Kerala. *DESIDOC Journal of Library & Information Technology* 30.6: 55-63.
- Mohamed Shaffril, A. H. and Uli, J. 2010. The influence of socio demographic factors on work performances among employees of government agricultural agencies in Malaysia. *The Journal of International Social Research* 3.10: 459-469.
- Mommoh, R. L. and Saka, K. A. 2016. ICT training, skills and use by librarians in special libraries in Abuja Federal Capital Territory, Nigeria. *JATLM. International* 2.77: 8-6.
- Morris, W. L., DePaulo, B. M., Hertel, J. and Taylor, L. C. 2008. *Singlism. Another problem that has no name: Prejudice, stereotypes and discrimination against singles in T.G. Morrison and M. A. Morrison (Eds). The psychology of modern prejudice*. Hauppauge New York 165-194.
- Motowidlo, S. J. and Van Scooter, J. R. 1994. Evidence that task performance should be distinguished from contextual performance. *Journal of Applied Psychology* 79. 475-480.
- Muchinsky, P. M. 2003. *Psychology applied to work*, 7<sup>th</sup> ed Brimont CA Wadsworth.
- Muller A., De Lange A. D., Weigl M., Vander, H. B., Ackermans, J and Wilkenloh, J. 2015. Task Performance above age 65. The role of cognitive functioning and job demand control. *Working, Ageing and Retirement*. Oxford University Press. 00.00: 1-13. Doi10.1093/workra/wav001
- Mun Yi, and Kim Lim, 2008. Predicting computer task performance: Personal goal and self efficacy. 1-25.

- Murphy, K. R. 1998. Dimensions of job performance In R. Dillion and J Pelligrino (eds) Testing Applied and Theoretical Perspectives 218-247 New York. Praeger.
- Nadler, J. T. and Kufal, K. M. 2014. Marital Status, Gender, and Sexual Orientation: Implications for employment hiring decisions. *Psychology of sexual orientation and gender diversity*. 1.3: 270-278
- Nair, K. K. and Gopal, R. R. 2014. Advocating different paradigm: Relevance of workplace creativity. *SIE Journal of Management*. 7.2: 142-150. <http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=84409567&site=ehost-live>
- Nath A., Bahl, G. and Kumar, P. 2007. Information and communication Technology and skills of librarian in the Chandigar city libraries. *International Caliber* 713-726.
- Narges, B., Zulhamri, A. and Jusang, B. 2011. The role of E-mail in improving task performance among the executives in Malaysia. *Australian Journal of Business and Management Research* 1.4: 52-62.
- Nasir, R., Mohammadi, M. S., Wan Shahrazad, W. S., Fatimal, O., Khairudin, R. and Halim, F. 2011. Relationship between organisation citizenship behaviour and Task performance. *The Social Sciences* 6.4: 307-312. DOI:10.3923/science.2011.207.312 <http://medwelljournals.com/abstract/?doi=science.2011.307.312>
- Nebeolise, L. N. 2013. Impact of information and communication technology (ICT) compliant librarians on library services delivery in academic library. The case of National Open University of Nigeria (NOUN) library. *International Journal of Engineering and Sciences* 2.8: 2319-1805.
- Nebo, C., Nwankwo, P. N. and Okwonkwo, R. I. 2013. The role of effective communication on organisation performance: A study of Nnamdi Azikwe University Awka. *Review of Public Administration and Management* 4. 8: 131-138.
- Nickols, F. 2016. Factors affecting performance. Paper. Distance Consulting 1-3.
- Nimal Perera G. D., Khatibi A., Navaratha N. and Chinna K. 2014. Job satisfaction and job performance among factory employees in apparel sector. *Asian Journal of Management Science* 3.1: 96-1104.
- Nina-Tavasaoli-Farahi, M. T. and Tahamatan, I. 2014. Evaluation of medical librarians' level of information and communication technology skill based on MLA statement a study in Iran. *Library Philosophy and Practice (e-journal, 2014 paper 1140* available at <http://digitalcommons.unl.edu/libphilprac/1140> Accessed in Nov. 2014.
- Nkanu, O. W. 2008. Utilisation of information and communication technology facilities in Nigerian university libraries. *International Journal of ICT* 5.2: 1-6.
- \_\_\_\_\_ and Okon, H. I. 2008. Digital divide: Bridging the gap through ICT in Nigerian libraries. *Library Philosophy and Practice*. 1- 13

- Nkamnebe, E. C. Okeke, I. C. Udeme, O. K. and Nkamnebe, C. B. 2015. Extent of information and technology skills possessed by librarian in University library in Anambara state, Nigeria. *Information and Knowledge Management* 5.9:22-31.
- Ng TWH, and Feldman, T. 2009. How broadly does education contribute to job performance? *Personnel Psychology*. 62: 89-134
- Norman, H. 2009. *Job performance: Learning goals slides*. McGraw- Hill Company as Ryerson Ltd 20133.
- Nonthacumjane, P. 2011. Key skills and competencies of a new generation of LIS Professionals. *IFLA* 37.4: 280-288.
- Nwabueze, A. U. and Ozioko, R. E. 2011. Information technology for sustainable development in Nigeria. *Library Philosophy and Practice* 1-6.
- Nwachukwu, V. N. 2015. Computer skill competence among academic librarians: an imperative for effective computerization of Nigerian Libraries. *A journal of library and information Science* 97-106.
- Nwakowa, E. and Okoli, B. E. 2012. Influence of Information and Communication technology on Secretaries in Government Ministries in Nassarawa State Research. *Journals of Information Technology*. 4.30: 93-97.
- Nweze, C. M. T. 2009. Women librarians in Nigerian universities: Their state, occupational characteristics and development. *Electronic Journal of Academic and Special Librarianship* 10.3: 1-6.
- \_\_\_\_\_ 2010. The use of ICT in Nigerian universities: A case study of Obafemi Awolowo University Ile Ife. *Library Philosophy and practice*. 2-10.
- Nwogo, E. C. 2011. Network literacy skills of academic library for effective service delivery: The case of university library system. <http://unlib.unlib.unl.edi/lppp>
- Nwokedi, V. C., Nwokedi, G. I., Amkpa, S. and Ogugua, J. (2017). Effect of browser competency and use on Information service delivery by librarians in universities in the South-east zone of Nigeria. *Academic research Journals*. 5.1: 19-26
- Nwosu, O. C., Ugwoegbu, U. and Okeke, I. 2013. Levels of motivation as correlates of library task performance in university library in the South East Nigeria IOSR. *Journal of Humanities and Society Science* 2.2: 52-55.
- Nwosu O, Okeke I. E. and Ejedafiru E. F. 2013. Challenges of electronic information management in Nigeria university libraries. *IOSR Journal of Humanities and Social Sciences (IOSR-JHSS)*. 13.2: 75- 79.
- Obaje, A. M. 2014. Assessment of levels of computer literacy skills of library personnel in university libraries of North Central Zone of Nigeria. *International Research Journal of Library and Information Science* 14.3: 402-413.

- Obinyan, G. A. and Unuabor, S.O. 2013. Interrogating the contribution of ICT to acquisition and application to effective library services in Nigeria. *Library Philosophy and Practice*. 1-23 <http://digital.common.unl.edu.libphilprac>
- Odongo, T. A. M. 2011. An assessment of ICT adoption in Kenya academic libraries: A case study of University of Nairobi Libraries. Research project of the school of Business Administration, University of Nairobi.47pgs
- Oduwole, A. A. 2006. Information technology skill acquisition and utilization as correlates of librarian job performance. Thesis. Dept of LARIS. University of Ibadan. Education.
- Oguche, D. 2017. Impact of information and Communication technology (ICT) literacy competence on job performance. *The Information Technologists* 13.1. 1-22.
- Oghenetega, L. U. Umeji, E. U. and Obue, C. N. 2014. Challenges associated with the use of ICT facilities in public library of Nigeria. *Developing Country studies* 4.22: 1-6.
- Ogochukwu, E. T. 2015. Digital literacy skills among librarians in University libraries in the 21<sup>st</sup> century in Edo and Delta States. *International Journal of Scientific and Technical Research* 4.8: 153-156.
- Ogwuche, M. A. 2009. The Impact of technology innovation on the performance of secretaries in business organisation. *Journal of Management & Administrative Development*. 1. 1
- Ogunbote, K. O. and Odunewu, A. O. 2009. Library information and communication technology use in teaching non-regular students in Nigeria universities. *An International Journal of ICT* 6.1: 69-76.
- Ogunleye, A. J. and Osekita, D. A. 2016. Effect of job status gender and employees' achievement motivation behaviour on work performance: a casestudy of selected local government employees in Ekiti State, Nigeria. 235-248. Retrieved doi:10.19044/esj.2016.v12n26p235 [URL:http://dx.doi.org/10.19044/esj2016.v12n26p235](http://dx.doi.org/10.19044/esj2016.v12n26p235)
- Ojedokun, A. A. and Moahi, K. H. 2007. *The use of digital library skills in the emergent information market in Bostwana. Education for Information*. IOS Press. 25. 211-231.
- Okewale, O. S. and Adetimirin, A. 2011. Information use of software packages in Nigeria university libraries. *Journal of Information Technology Impact*. 11.3: 211-224.
- Okiki, C. O. 2018. Enhancing Job performance of librarians in academic libraries through technological change. ResearchGate. <https://www.researchgate.net/publication/328498903>
- Okiy, R. 2010. Globalisation and ICT in academic libraries in Nigeria. The way forward. *Library Philosophy and Practice*. (e-journal) 1-10.
- Okpe, J. 2012. Annual Performance Appraisal of Practising Librarian: A study of Academic Institutions in Nigeria. *Arabian Journal of Business Management Review*. (OMAN) chapter. 2.5: 10-19.
- Okogwu, F. I. and Akidi J. O. 2011. The role of the library in the accreditation of Nigerian universities' academic programmes. *Nigerian Libraries*. 44.2: 89-97.

- Okorie, A. 2011. Demographic and socio economic attributes as determinants of information and communication technology use for scholarly communication in Nigerian university. *Library Philosophy and Practice (e-journal)* 1-9.
- Olatokun, W. 2007. Availability and accessibility and use of ICTS by Nigerian women academics in Malaysia. *Journal of Library and Information Science* 12.2: 13-23.
- \_\_\_\_\_. 2008. Gender and national ICT policy in Africa: Issues, strategies and policy options information development. 24.1: 53-65.
- \_\_\_\_\_. 2009. Analysing socio demographic differences in access and use of ICTs in Nigeria using the capability approach. *Issues in Information Science and Information Technology* 6. 479- 496.
- Olayemi, K. J., Umar, G. O., Yemi-Peters, O. E, Sokari, V. Haliru. Z.A. 2017. The application of information and Communication technology for service delivery in the serial unit of Bayero University. *Educational Research* 8.3:927-033.
- Oluwatayo, I. and Ahmed, A. 2008. Gender differentials in information communication technology (ICT) usage in rural Nigeria: Case of Atibo Local Government area of Oyo State. *Asian African Journal of Economics and Econometrics* 8.1: 15-27.
- Omekwu, C. and Echezona, R. I. 2008. Emerging challenges and opportunities for Nigerian libraries in global service. Paper delivered at the Nigerian Library association 46th Annual National conference and AGM held at Arewa House Conference Centre Kaduna 1-6 June HEBN publishers PLC, Ibadan Pp63-76.
- Omoniyi, O. J. and Akinboro, E. O. 2009. Re-positioning librarianship education and practice for ICT challenges in Nigerian university libraries. *An International Journal of Information and Communication Technology (ICT)* 6.1: 45-52.
- Omosor, U. A. 2014. Effect of Technology on librarians in academic libraries in Nigeria. *Journal of Information and Knowledge Management* 5.2: 1-27.
- Onuoha, C. O., Anyanwu, E. U., Ossai-onah, O. Y. and Amechi, N. M. 2015. Challenges in promoting innovation and creativity among library and information science professional in Nigeria: The experience of selected libraries in Imo State. *Journal of Emerging Trends in Computing and Information Science* 6.1: 25-30.
- Osarenren, N. and Ogunleye, T. 2009. Gender difference in job ability perception and task performance among professionals in male dominated professions. *Edo Journal of Counselling* 2.1: 66-74.
- Oriogu, C. D. Ogbuiyi, S. U. and Ogbuiyi, D. C. 2014. Availability and Accessibility of ICT in the provision of information resources to undergraduate students in Babcock University library. *Advances in Social Science Research Journal* 2.1: 1-8
- Owolabi, S. E. 2013. Socio economic factors as a determinant of access and use of ICT by staff of University libraries in Oyo State. *Library Philosophy and Practice* 947 e-journal 1 – 17.

- Owoyemi, O. and Olusanya, O. 2014. Gender: A precursor for discriminating against women in paid employment. *American Journal of Business and Management* 3.1: 10-14.
- Oyedipe, W. J. and Popoola, S.O. 2017. Access to and use of information and communication technology and task performance. *Mousaion Journal*, 35 (4) 1-21. <https://doi.org/10.25159/0027-2639/4144>
- \_\_\_\_\_. 2018. ICT skills, use and task performance among library personnel in public university libraries. *Information Impact: Journal of Information and Knowledge Management*. 9.2: 82-97. <http://dx.doi.org/10.4314/ijikm/v.9i2.7>
- \_\_\_\_\_. 2019. Educational status, work experience, accessibility to ICT and use as predictors of task performance among library personnel. *KIIT Journal of Library and Information Management*. 6.2: 176-188.
- \_\_\_\_\_. 2019. Influence of age, job status, ICT literacy skills and ICT use on task performance of library personnel in public universities. *International Journal of Knowledge Content Development & Technology*. 9.3: 43-61. <http://dx.doi.org/10.5865/IJKCDT.2019.9.3.043>
- Oyelana, A.A. and Thakhati, D. R. 2015. Assessing the role of ICT technology in enhancing employee performance in a selected local government administration (LGA) I South Africa, *Journal of Communication* 6.1: 229-235.
- Oyeniya, A. S. 2013. Gender differences in Information retrieval skills and use of library. *Library and Information Science* 5.7: 206-215.
- Oyewole, G. O. and Popoola, S. O. 2013. Effects of Pscho social factors on job performance of library personnel in Federal Colleges of Education in Nigeria. *Library Philosophy and Practice (e-journal)* paper 872. 1-26.
- \_\_\_\_\_. 2015. Personal factors and work locus control as determinants of job performance of library personnel in federal colleges of education in Nigeria. *Chinese Librarianship an International Electronic Journal* 40, URL: <http://www.wiclc.us/clij/c140OP.pdf>
- Padmanabhan, L. and Magesh, R. 2016. Difference between employee marital status and performance in IT industry. *Imperial Journal of Interdisciplinary Research* 2.6: 1173-1176.
- Palumbo, M.V. Miller, C. E. and Shalin, V.L. 2005. The impact of job knowledge in the cognitive ability performance relationship. *Applied H. R. M. Research* 10.1: 13-20
- Park, D. C., Gutchess, A. H, Michelle, L. M and Stine-Morrow, E. A. L. 2007. Improving cognitive function in older adults: Nontraditional Approaches. *Journal of gerontology* 62B. 45-52.
- Patel, U. and Bhavsar, V. 2012. The changing role of library professional in academic libraries. *Research Paper* 1.5: 73-74.
- Pateria, R. 2018. Skill development of library and information science professionals in the digital era. *Indian Journal of Agricultural Library and Information Services*. 34. (1) 68-72.

- Peng, Y. P. 2011. Which job Satisfaction is more important? The relative contributions of intrinsic and extrinsic job satisfaction to contextual and task performance of university librarians. *Asian Conference on Literature and Librarianship Official Conference Proceedings Osaka Japan LibriAsia*127-139.
- Philip, C. Candy 2002. Information literacy and lifelong learning. White paper UNESCO the US National Commission on Libraries and Information Science, National Forum on Information Literacy for use at the Information Literacy Meeting of Experts Prague, The Czech Republic. 1-16.
- \_\_\_\_\_ 2004.*Linking and Thinking: Self directed learning in the digital age. Commonwealth of Australia. Pandora electronic collections.* Department of education Science and Training. 344 pages.
- Popoola,A. A.,Ogunloye, G. O. and Ogini, O. I. 2011. Performance measure and job constraints: Implications for women in academics in Nigerian Universities. *International Journal for Cross Disciplinary subjects in Education. (IJCDSE) Special Issue 1.* 596-600.
- Priti, J. 2013. A padigm shift in the 21<sup>st</sup> century academic libraries and librarians: Prospectus and opportunities. *European Journal of Academic Research* 1.3: 133-147.
- Priver, A. 2013. ICT utilisation and employee performance a case study of Uganda Christian University. Research at UCU depository. <http://hdl.handle.net/123456789/27>
- Pukalos, E. D., Sharon, A., Donovan, M. A. and Plasmodion, K. E. 2000. Adaptiveperformance in the workplace. Development of a taxonomy of adaptive performance. *Journal of AppliedPsychology.* 85.4: 612-624.
- Quadri, G. O. 2012. Impacts of ICT skills on the use of e-resources by information professionals: A review of related literature. *Library Philosophy and Practice (e- journal)* 762. 1-9.
- Quareshi, M. I., Bashir,S., Saleem, A., Javed, A., Saadat,U. R. and Safdar, Z. 2013. Analysis of various determinants which affect on the job performance: A case study on Private and public universities employee of D.I. Khan. *Gomal University Journal of Research* 29.1: 1173-1176.
- Qutab, S.,Bhati, R. and Ullah, F. 2014. Adoption of ICT for library operations and services: A comparison of public and private university in Pakistan. *Library Philosophy and Practice*1-10.
- Rasa, M. M. and Nath, A. 2007. Use of Information Technology in university libraries in Punjab, Chandigarh and Himachal Prades. A comparable study-*The international Information and Library Review*39. 211-227.
- Ripley, D. 2002. Improving employees' performance moving beyond traditional HRM responses: *A contributory Paper* 1-6.
- Robbins, S. P. and Coutler, M. 2007. Management. Pearson Prentice Hall. New Jersey. 587

- Robinson, S. P., Judge, T. and Songhai, S. 2009. *Organisation Behaviour*. (12<sup>th</sup> ed) Pearson Education Inc. Doorling Kindersley. India 782.
- Rosenberg, D. 2005. Towards digital library. *International Network for availability and scientific publications INASP I. K. 2.3*: 289- 293.
- Rotundo M. 2002. Defining and measuring individual level of job performance: A review and Integration. *Journal of Applied Psychology* 87.1: 66-80.
- Royal College of Physics, 2004. Age and Employment. Faculty of Occupational Medicine.
- Safahieh, H. and Asemi, A. 2008. Computer literacy skill of librarians: A case of Isfan University Libraries. I Abdullah et al(Eds.): *COLIS*. 51-58.
- Saleem, A. Tabusun, S. Z. and Batcha, M. S. 2013. Application and Uses of Information Communication Technology (ICT) in Academic Libraries: An Overview. *International Journal of Library Science* 2.3: 49-52.
- Saheed, R., Mussawar, S., Lodhi, R. N., Iqbal, A. N., Nayab, H. H. and Yaseen, S. 2013. Factors affecting the Performance of Employee at work place in the Banking Sector of Pakistan. *Middle East Journal of Scientific Research* 17.9: 1200-1208.
- Sahu, M. K. 2013. Skill Competences and current practice of library professionals in Engineering Colleges in Odiha: An analytical Study. *Journal of Library and information Science*. 3.4: 1-16.
- Saka, K. A. and Abdulrahman, A. B. 2008. Use of computer among library staff in four universities of technology libraries in Northern Nigeria. *Information Technology* 5.2: 55-61.
- Saka, K. A., Oyedum, G. U. and Song, I.S. 2016. Influence of continuing professional development and skills acquisition on librarians performance in two state capitals in Northern Nigeria. *Journal of the Balkan Libraries* 4.1: 1-7
- Salleh, F. Yakubu, N. and Dzulkifli, Z. 2011. The influence of skill level on job performance of public service employee in Malaysia. *Business and Management Review*. 1.1: 31-40.
- Sankari, R. L. and Chinasami, K. 2014. ICT skills in Engineering colleges in Salem and Namakkal Districts: A case study. *International Journal of Humanities and Social Sciences Invention* 3.12: 9-17.
- Saravani, S. J. and Haddow, G. 2011. The mobile library and staff preparedness: Exploring staff competencies using the unified theory of Acceptance and use of Technology model. *Australian Academic & Research Libraries* 42.3: 179-190.
- Satpathy, S. K. and Maharana, R. K. 2011. ICT skills of LIS professionals in Engineering Institutions of Orissa India: A case study. *Library and Philosophy Practice E-journal* 1-12.
- Seenaa, S. T, and Sudhier Pillar, K. G. 2014. A study of ICT skills among library professionals in the Kerala University library system. *Annals of Libraries and Information Studies* 61. 132-141.

- Sergio, R.P. and Marcano, E. R. 2013. Emotional intelligence and demographics profile variables as predictor of job performance among bank managers in the Middle East. *International Journal of Arts and Science*. 6.2: 377-388.
- Screenivasulu, V. 2000. The role of a digital librarian in the management of digital information systems- DIS *The electronic library*. 18.1: 12-20.
- Schermerhon, J. R. 2008. *Management*. John Wiley and Sons. USA.494pg
- Shadare,O.A. 2011. Management Style and demographic factors as predictors of management efficiency in work organisation in Nigeria, *The International Journal of Business and Economics Research Journal* 10.7: 85-93.
- Shivaputrapa, I. K. and Ramesh, R. N. 2013. Evaluation of librarianship and information professionals working in the engineering college libraries in Karnataka, India: a survey. *Program electronic library and Information System* 47.4: 344-368.
- Sharma A. K. 2014. The impact of ICT on library automation in the selected libraries of Dehradun: A case study. *Library Philosophy and Practice*. E-journal 1180. 1-14.
- Shehu, E. A. Urhefe, E. A. and Promise, A. 2015. Accessibility and utilization of internet services in Nigeria library: an empirical study. *Int Journal of Academic Research and Reflection* 3.5: 78-89.
- Sherman, A., Bohlander, G. and Snell, S. 1998. *Managing human resources*. 11<sup>th</sup> Ed. Ohio. South West College Publishing.
- Siddike, A. K., Munchi, M. N. and Sayeed, M. A. 2011. Adoption of ICT in the university Libraries in Bangladesh. An Explorative Study. International Seminar on ‘‘Vision 2021 – The role of libraries for building digital Bangladesh organised by Library association of Bangladesh. 153-163
- Simmon, M. and Corral, S. 2011. *The changing educational needs of subject librarians: A survey of UK practitioner opinions and course content Education for Information*. IOS Press. 21-44.
- Singh, S. P. and Pinki, 2009. New skills for library professionals in technology intensive environment. *ICAH-Change Management* 1-6.
- Sivakumaren K. S. Geetha V. and Jeyaprakash B. 2011. *Facilities in University libraries: A study of public libraries. Library Philosophy and Practice*. 1-6.
- Skirbekk, V. 2004. Age and individual productivity: A literature survey. Australian Academy of Sciences Press. <http://www.jslor.org/stable/23025440>. Retrieved 9/12/14.
- Smith, M. Q. 2005. The impact of information technology change on the management and operations of academic library. Research Project. University of the Western Cape. 1-20.
- Sonnentag, S. and Freese, M. 2001. Performance concepts and performance theory: Psychological management of individual performance.(Ed) Sonnentag. John Wiley & Sons Ltd. 1-19.

- Sonnentag, S., Volmer, J. and Spychalla, A. 2010. *Job performance sage: Handbook of Organisational Behaviour, Micro Approaches*. (ed) Barling J. Los Angeles California. Sage. 2. 427-447.
- Stajkovic, A. D. and Luthan, F. 2003. *Behavioural management and task performance in organisations: conceptual background meta analysis test of alternative models*. Personnel Psychology Inc. The Wilson Company 56.1: 155-194.
- Stefan, J. I. 2011. Comprehensive performance –Measurement for pension funds- some initials thought. Slides.
- Steijn, B. and Tijdens, K. 2005. The use of ICT in the workplace: opening the black box. Paper for ICT, the knowledge society and changes in work conference, Thematic session. The Hague.
- Stetar, B. 2000. Retool your workers: You upgrade your technology but what about your people. *Advance Manufacturing* 13-16. [www.advancemanufacturing.com](http://www.advancemanufacturing.com)
- Stuman, M. C. 2003. Searching for the inverted U- shaped relationship between time and performance: Meta-analyses of the experiences/performance, tenure/performance and age /performance relationships. *Journal of Management* 29. 609-640.
- Subangco, V. 2016. Organisation and individual determinants of success, College of Business Administration, University of Phillipines. Slides.
- Sukkoor, A. 2010. Information and communication technology literacy among library professional Calicut University, Kerala. *Desidoc Journal of Library and information Technology* 30. 6: 55-63.
- Tella, A and Ayeni, C. O. 2006. The impact of self efficacy and Prior computer knowledge experience on creativity of New Librarians in selected University libraries in South-west, Nigeria.
- Talmud, I. and Izraeli, D. 1999. The relationship between gender and performance issues of concern to directors: correlates or institution. *Journal of Organisation Behaviour*. 20: 459-474.
- Thakur, R. and Sharma, D. 2019. Study of impact of demographic variables on quality of working life. *Productivity, New Delhi* 59.4:358-365 DOI"10.32381/PRO.2019.59.04.5
- Thanuskodi, S. 2011. ICT literacy among library professionals in the engineering Tamil Nadu: An Analytical Study. *International Journal of Digital Library Services*. 1. 131-141.
- Tibedena, K. G. P. and Ogao, P. J. 2008. Information and Technologies Acceptance and use among community in Uganda: A model for hybrid library services end users- *Information Technologists*. 391-410.
- Timothy, T. 2010. Gender differences in intention to use technology: a measurement of variance analysis. *British Journal of Education Technology* 41.6:120-123.

- Tishman, F. M., Looy, V. and Bruyere, S. 2012. Employer strategies for responding to Aging Workforce. Report by NTAR leadership centre. 1-39. [www.ntarcenter.org](http://www.ntarcenter.org)
- Tiraieyari, N. and Uli, J. 2011. Moderating effects of employee gender and organisation tenure in competency performance relationships. *African Journal of Business Management*. 5.33: 12898-12903. <http://www.academicjournal.org/AJBM>
- Twari, B. K. and Sahoo, K. C. 2013. Infrastructure and use of ICT in university libraries of Rajasthan (India). *Library Philosophy and Practice* 1-19.
- Ubale M. R. 2018. Use of information and communication technology ICT in the library. *Aajushi International Interdisciplinary Research Journal (AIIRJ)* v.1: 1-4
- Ubogu, J. O. 2019. Impact of information technology in Nigerian university libraries. *Open Access Library Journal*. 6. E5340 Doi:10.4236/oalib.1105340.
- Ufuophu-Biri, E. and Iwu, C. G. 2014. Job Motivation, job performance and Gender relations in the Broadcast Sector in Nigeria. *Mediterranean Journal of Social Science* 5.16:191-198.
- Ugboma, M. U. 2006. ICT literacy among practicing librarians in Delta State. *Information Manager* 6.1&2:1-7.
- Ugochukwu, E.T. 2015. Digital literacy skills among librarians in the university libraries in the 21<sup>st</sup> century in Edo and Delta States. *Nigeria International Journal of Scientific and technology Research* 4.08:153-159.
- Ugwu, C. I. and Ugwu, M. E. 2017. Demographics variables and job performance of librarians in university libraries in South-east. *Library Philosophy and Practice* 1-23.
- Ugwuanyi, F. C. 2009. Information and communication technology ICT literacy among academic librarians in Enugu State. *An International Journal of Information and Communication Technology ICT* 6.1:123-132.
- Ukachi, N. 2005. Utilisation of information and communication technologies in reference services of academic libraries threats and challenges. *Information Technology* 5.2:62-69.
- Unuegbu, M. C., Amechi, N., Njoku I. and Opara, I. 2015. Influence of socio demographic variables on the use of information and communication technology lecturers in library schools in South-east and South South-south Nigeria. *International Journal of Humanities and Social Science Studies*. IJHSS. 11.11: 279 -289.
- Usman koya, P. T. 2018. Information Technology skills required for library professionals in digital era. An introspection. *International Journal of Library and Information Studies*. 8. 1: 43-50.
- Uwaifo, S. O. 2009. Predictive effect of academic qualifications on perceived ease of use of computer based libraries by staff in Nigerian university libraries. *Nigerian Library Association* 42. 60-71.
- Vachav, O., Antonin P. and Petra J. 2011. Performance drivers and ICT tools in Human Resources Management. *Journal of Competitiveness* 2. 52-70.

- Venkatesh, V. Bala, H. and Skyes, T. A. 2010. Impacts of information and communication technology implementation on employees jobs in serviceorganisations in India- a multi-method longitudinal field study. *Production and Operation Management Society POMS* 9.5: 591-613.
- Vijayakumar, A. and Antony, S. M. 2015. Ictskills among women library professionals in SSUS and CUSAT. *Asian Journal of Multidisciplinary Studies*3.5:142- 148www.ajms.com
- Viswesvaran, C. and Ones, D. S. 2000. Perspectives on models of job performance. *International Journal of selection and assessment* 8.4: 216-226.
- Villanova, P. and Roman, M. A. 1993. A meta analytical review of situational constraints and work related outcomes: Alternative approaches to conceptualisation. *Human Resources Management Review* 3.147-175.
- Vischer, C. M. R. 2006. The concept of woroskplace performance its value to managers. *California Management Review* 49.2:1-18.
- Waldman, D. A., Avoho, B. J. and Bruce, J., 1996. A meta analysis of age differences in job performance. *Journal of Applied Psychology* 7.1: 33-38
- Wanangeye, W. L. and George, B. O. 2016. Analysing application of ICT and use for information provision by library staff of Mount Kenya University Library, Kisii Campus. *World Journal of Computer application and Technology* 4.2:23-33.
- Warr,P. 2001. In what circumstances does Job performance vary with age? *European work and organisational psychology*3.3:237-249
- Warrach, D. A. and Ameen, K. 2000. What motivates Lis professional in the institutionof higher learning: a case of Pakistan World Library Information Congress 76<sup>th</sup> IFLA General Conference and Assembly, Gothernburg.
- Warshaurer, M. and Tina, M. 2010. New technology and digital worlds analyzing evidence of equity inaccess, use and outcomes. *Review of Research in Education* 34: 179-225.
- West, D. M. 2015. Digital divide: Improving Internet access in the developing world through affordable services and diverse content. B Center for Technology Innovation at Brookings. Accessed 17<sup>th</sup> July, 2018. [http://www.broking.s.edu/wpcontent/uploads/2016/06/West\\_Internet-Access.pdf](http://www.broking.s.edu/wpcontent/uploads/2016/06/West_Internet-Access.pdf)
- Westerman, S. J. and Davies, D. R. 2000. Acquisition and application of new technology skills, the influence of age. *Occupational Medicine* 50.7:478-482. Retrieved 14<sup>th</sup> July, 2012 <http://occwed.oxfordjournals.org>
- Whitmire, E. 2002. Academic library performance and undergraduates' library use and educational outcomes. *Library and Information Science Research*24.107-128.
- Wilson, K. B., Tete-Mensah, I. and Boateng 2014. Information andcommunication technology use inhigher education: Perspectives from students. *European Scientific Journal*,10.19: 161-171.

- Womboh, B. S. H. and Abba, T. 2008. The state of information and communication technology ICT in Nigerian universities libraries: *Library Philosophy and Practice* 1-7.
- Woodward, H. 1999. Management of printed and electronic serials in collection management in Academic Libraries.
- Yahaya, L. A. 1999. Gender Differences, behavioural patterns and Job performance of federal civil servant in Nigeria. *Ilorin Journal of Education*. 19.120-128.
- Yousef, A. B., Martin, L. Omrani, N. 2014. Does ICT use improve contextual performance. Recent evidence from the European Union. *Revue Deconomie Politique*.
- Young, L., Miliner, M., Edmund, D., Pentsil, G. and Bronan, M. 2014. The tenuous relationship between salary and satisfaction. *Journal of Behaviour Studies in Business* 7. 1-9.
- Zhu, L. 2012. The role of paraprofessionals in technical services in academic libraries. *LRTS* 56.3: 127-154.

**APPENDIX I**

**DEPARTMENT OF LIBRARY, ARCHIVAL AND INFORMATION STUDIES,  
FACULTY OF EDUCATION, UNIVERSITY OF IBADAN.**

Dear Sir/Madam,

This questionnaire is designed to collect data only for the purpose of research, towards the fulfillment of requirement for a higher degree. You are assured of the strictest confidentiality and anonymity. Thank you very much for your time and cooperation.

OYEDIPE, W. J. (MRS)

**Library Personnel Task Performance Questionnaire.**

**SECTION A: PERSONAL DATA**

1. University (please state).....
2. Name of Library.....
3. Gender : Female ( ) Male ( )
4. Age: as at last birthday.....
5. Marital status: Single ( ) Married ( ) Divorce ( ) Widowed ( )
6. Status (please tick where appropriate) University Librarian ( )
7. Dep. University Librarian ( ) Principal Librarian ( ) Senior Librarian ( ) Librarian 1 ( )  
Librarian II ( ) Assistant Librarian ( ) Library Officer ( ) Higher Library officer ( ) Senior  
Library officer ( ) Principal library officer I ( ) Principal library officer II ( ) Chief library  
officerI ( )Chief library Officer II ( )
8. Highest Academic Qualification: Ph. D ( ) MLS ( ) BLS ( ) Diploma in Lib studies ( )  
Others specify.....
9. Years of workexperience in the library.....
10. Level of Income a. Very High ( ) b. High ( ) c. Moderate ( ) d. Low ( )
11. In which section of the library do you work? a. Administration ( ) b. Acquisition ( ) c. Technical  
( ) d. Circulation ( ) e. Serials ( ) f. Media( ) h. Reference ( ).  
Others specify.....

**SECTION B: LEVEL OF ICT LITERACY SKILLS OF LIBRARY PERSONNEL**

12. Kindly rate your ICT skills level when using ICTs and its peripherals to perform tasks, using this modality: VH=Very high, H=High, M=Moderate, L= Low, VL=Very low.

ICT SKILLS	V.H	HH	M	VL	VL
<b>Computing Skills</b>					
Word processing skill					
Printing, editing,					
Scanning and uploading skills					
Ability to download and save					
Power point Presentation skills					
Formatting and document processing skills					
<b>Internet Navigation Skills</b>					
Browsing and navigating the Internet					
Ability to use different online search engines					
Information sources evaluation skills					
Web page creation skills					
Ability to partake in online discussion					
<b>Computing Management Skills</b>					
Trouble shooting skills					
Data creation and Management Skills					
Ability to install and activate software i.e.anti virus					
E-mail management skills					
Managerial skills					
<b>Computing Application Skills</b>					
Ability to use OCLC					
Information storage and preservation skills					
Bar coding skills					
Virtual learning Skills					
Ability to use web 2.0 in library services					
Digitisation skills: Information capturing, classification					
Library automation					

**13. SECTION C: ACCESS TO ICT FACILITIES**

How easily accessible are the following ICT facilities? Rate your level of accessibility to the following ICT facilities.

ICT facilities	Very easily accessible	Easily accessible	Occasionally Accessible	Not Accessible
Personal computer desktop/Laptop/Tablet.				
Printer				
Scanner				
Barcode Scanner				
Barcode Reader				
Photocopier				
CD/DVD				
Internet				
Fax machine				
CCTV				
Multi-media Projector				
Television				
Videoconferencing				
Digital camera				
Interactive white board				
Telephone / IP phones (Smart phones)				

**14. SECTION D. FREQUENCY OF ICT USE**

Indicate the frequency with which you have been using the following ICT in task performance.

Type of ICT	Daily	Weekly	Twice a week	Once a month	Not at all
Computer/laptop/tablet					
Printer					
Scanner					
Barcode Scanners					
Barcode Readers					
Photocopier					
Internet					
CD/ DVD					
Fax					
CCTV					
Multimedia projector and Projection screen					
Television					
Videoconferencing					
Digital camera					
Interactive white board					
Telephone/Ipad phones/Smart Phone					

**SECTION E. SELF EVALUATION OF TASK PERFORMANCE OF LIBRARY PERSONNEL**

15. Rate the level of your task performance in the library using this rating scale: Very High = 5; High = 4; Moderate = 3; Low = 2 and Very Low = 1.

<b>Job Knowledge:</b> Ability to	5	4	3	2	1
perform tasks in accordance with laid down principles and procedures					
understand the library collections and core system (catalogs website databases etc)					
keep knowledge current					
demonstrate knowledge and skills needed to perform tasks effectively					
demonstrate depth, currency and job knowledge.					
<b>Job skills:</b> Ability to					
demonstrate skills relevant to task					
demonstrate physical competency skills.					
demonstrate affective skills					
pay attention to details.					
maintain skills in current tools and technologies necessary to complete job tasks					
<b>Task Quality:</b> Ability to					
carry out task accurately and neatly.					
meet standard procedure for executing tasks.					
multi task in an effective manner.					
produce exceptionally quality tasks.					
execute tasks with minimal error					
<b>Task Quantity:</b> Ability to					
accomplish acceptable volume of work under normal situation.					
fulfill assigned responsibilities and duties					
ensure that outputs meet and exceeds expectation.					
meet stipulated results/outcomes					
manage quantifiable assignment					
<b>Planning/Organising:</b> Ability to					
demonstrate skills in planning, organising and evaluating subordinate					
initiate clearer objectives					
monitor and control resources					
exhibit strong organisationskills					
identify resources that will meet organisation goals and objectives					
<b>Supervision:</b> Ability to					
seek clearance when goals and priorities are unclear.					
demonstrate quality leadership					
influence other members of staff positively					
harness both human and material resources to achieve set goals					
identify problems and proffer solution.					
<b>Communication:</b> Ability to					
listen carefully and seek clarification to ensure understanding.					
effectively communicate information and ideas orally or in writing.					
share information clearly and concisely.					

communicate effectively.					
use facial expression gestures, body language to communicate effectively.					
<b>Creativity:</b> Ability to					
identify and analyse problems					
formulate alternative solution.					
take/recommend appropriate action to resolve problem					
follow up to ensure problems are resolve					
take realistic decision.					
<b>Timeliness:</b> Ability to					
promptly execute tasks					
manage time well					
complete tasks on schedule					
prioritised tasks					
be consistent in carrying out assigned task					
<b>Adaptability:</b> Ability to					
adapt to changes in direction and priority					
adjust to new work processes					
perform task demanding physical strength					
quickly and proficiently learn new methods					
accept new challenges, responsibilities and assignments.					

**SECTION F**  
**SUPERVISORS EVALUATION RATING SCALE**

Dear sir/madam,

This questionnaire titled supervisors evaluation rating scale is designed to collect data for research purposes towards fulfilling a higher degree qualification. You are assured of strictest confidentiality and anonymity. Thanks very much for your cooperation.

OYEDIPE W. J. MRS.

**DEMOGRAPHIC INFORMATION**

Name of University .....

Unit of respondent.....

Instruction: Kindly rate the task performance of library personnel working in your unit (librarians, library officers) using the following ratings: VH. – Very High -5; H– High -4; M – Moderate -3; L – Low-3; VL – Very Low.

<b>Job knowledge:</b> Ability to	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
perform tasks in accordance with laid down principles and procedures				..	
understand the library collections and core system (catalogs website databases etc)					
keep knowledge current					
demonstrate knowledge and skills needed to perform tasks effectively					
demonstrate depth, currency and job knowledge.					
<b>Job skills</b>					
demonstrate skills relevant to task					
demonstrate Physical competency skills.					
demonstrate affective skills					
pay attention to details.					
maintain skills in current tools and technologies necessary to complete job tasks					
<b>Task Quality:</b> Ability to					
carry out task accurately and neatly.					
meet standard procedure for executing tasks.					
multi task in an effective manner.					
produce exceptionally quality tasks.					
execute tasks with minimal errors					
<b>TaskQuantity:</b> Ability to					
accomplish acceptable volume of work under normal situation.					
Ability to fulfill assigned responsibilities and duties					
Ability to ensure that outputs meet and exceeds expectation.					
Ability to meet stipulated results/outcomes					
<b>Planning/ Organising:</b> Ability to					
demonstrate skills in planning, organising and evaluating subordinate staff					

initiate clearer objectives					
monitor and control resources					
exhibit strong organisationskills					
identify resources that will meet organisation goals and objectives					
<b>Supervision:</b> Ability to					
seek clearance when goals and priorities are unclear.					
demonstrate quality leadership					
influence other members of staff positively					
harness both human and material resources to achieve set goals					
identify problems and proffer solution.					
<b>Communication:</b> Ability to					
listen carefully and seek clarification to ensure understanding.					
communicate information and ideas orally or in writing.					
share information clearly and concisely.					
communicate effectively.					
use facial expression gestures, body language to communicate effectively.					
<b>Creativity:</b> Ability to					
identify and analyse problems					
formulate alternative solution.					
take/recommend appropriate action to resolve problem					
follow up to ensure problems are resolve					
take realistic decision.					
<b>Timeliness:</b> Ability to					
promptly execute tasks					
manage time well					
complete tasks on schedule					
prioritised tasks					
be consistent in carrying out assigned task					
<b>Adaptability:</b> Ability to					
adapt to changes in direction and priority					
adjust to new work processes					
perform task demanding physical strength					
quickly and proficiently learn new methods					
accept new challenges, responsibilities and assignments.					

Thank you for responding to the questionnaire.

Level of ICT Literacy Skills of Library Personnel

**RELIABILITY ANALYSIS - SCALE (ALPHA)**

**Reliability Coefficients**

*N of Cases* = 30.0                      *N of Items* = 24

Alpha = .9612

*Correlation between forms* = .8097    *Equal length Spearman-Brown* = .8949

*Guttman Split-half* = .8912    *Unequal-length Spearman-Brown* = .8950

12 Items in part 1                      11 Items in part 2

*Alpha for part 1* = .9351    *Alpha for part 2* = .9366

Access to ICT Facilities

**RELIABILITY ANALYSIS - SCALE (ALPHA)**

**Reliability Coefficients**

*N of Cases* = 30.0                      *N of Items* = 16

Alpha = .9114

*Correlation between forms* = .7557    *Equal length Spearman-Brown* = .8609

*Guttman Split-half* = .8539    *Unequal-length Spearman-Brown* = .8609

8 Items in part 1                      8 Items in part 2

*Alpha for part 1* = .8297    *Alpha for part 2* = .8690

Frequency of ICT Use

**RELIABILITY ANALYSIS - SCALE (ALPHA)**

**Reliability Coefficients**

*N of Cases* = 30.0                      *N of Items* = 16

Alpha = .8889

*Correlation between forms* = .7355    *Equal length Spearman-Brown* = .8476

*Guttman Split-half* = .8464    *Unequal-length Spearman-Brown* = .8476

8 Items in part 1                      8 Items in part 2

*Alpha for part 1* = .8083    *Alpha for part 2* = .8163

Self Evaluation Of Task Performance Of Library Personnel

**RELIABILITY ANALYSIS - SCALE (ALPHA)**

**Reliability Coefficients**

*N of Cases* = 30.0                      *N of Items* = 50

Alpha = .9788

*Correlation between forms* = .6183    *Equal length Spearman-Brown* = .7642

*Guttman Split-half* = .7359    *Unequal-length Spearman-Brown* = .7642  
*25 Items in part 1*                      *25 Items in part 2*  
*Alpha for part 1* = .9635    *Alpha for part 2* = .980

*Supervisor Evaluation Rating*

*RELIABILITY ANALYSIS - SCALE (ALPHA)*

*Reliability Coefficients*

*N of Cases* = 30.0    *N of Items* = 50

*Alpha* = .9860

*Correlation between forms* = .9061    *Equal length Spearman-Brown* = .9507  
*Guttman Split-half* = .9479    *Unequal-length Spearman-Brown* = .9507  
*24 Items in part 1*                      *24 Items in part 2*  
*Alpha for part 1* = .9739    *Alpha for part 2* = .9759