

**CONTINUOUS PROFESSIONAL DEVELOPMENT, PROFESSIONAL
COMPETENCIES AND WORK ENGAGEMENT OF LIBRARIANS IN FEDERAL
UNIVERSITIES IN NORTH -WEST, NIGERIA**

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CERTIFICATION

This thesis titled, **CONTINUOUS PROFESSIONAL DEVELOPMENT, PROFESSIONAL COMPETENCIES AND WORK ENGAGEMENT OF LIBRARIANS IN FEDERAL UNIVERSITIES IN NORTH-WEST, NIGERIA**, prepared and submitted by **ALI, GARBA**, in partial fulfilment of the requirements for the **DOCTOR OF PHILOSOPHY** (ICT in Information Resources Management), is hereby accepted.

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DEDICATION

This work is dedicated to Almighty God and my delightful family.

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ABSTRACT

Work engagement is vital to the realization of the aims and objectives of any organization. In the current competitive knowledge economy organisations require engaged employees to survive. The condition of work engagement in Nigerian university libraries is unsatisfactory as the level of work engagement of librarians is observed to be low as shown by many empirical studies. This trend is also observable in federal universities in North-West, Nigeria. Continuous Professional Development (CPD) may improve their work engagement through education and training which will allow them to update their skills and knowledge. Unfortunately, there seems to be inadequate attention given to researches on CPD and professional competencies as possible as possible factors affecting work engagement of librarians. Hence, the study investigated the influence of CPD and professional competencies on work engagement of librarians in federal universities in North-West, Nigeria.

The study adopted a survey research design. The population of the study comprised 332 number of librarians in 10 federal universities in North-West, Nigeria. Total enumeration was used for the study. A structured validated questionnaire was used for data collection. The Cronbach's alpha reliability coefficient for the constructs ranged from 0.78 to 0.98. A response rate of 91.9% was achieved. Data were analysed using descriptive and inferential statistics (simple and multiple linear regression analysis).

The findings revealed that CPD and professional competencies jointly and significantly influence work engagement of librarians in federal universities in North-West, Nigeria ($Adj.R^2 = .603$, $F(2,302) = 231.627$, $p < 0.05$). CPD had significant influence on work engagement of librarians ($R^2 = .410$, $\beta = .633$, $F(2, 302) = 104.843$, $p < 0.05$). Also professional competencies significantly influenced work engagement of librarians. ($R^2 = .485$, $\beta = .696$, $F(2, 304) = 142.266$, $p < 0.05$).

The study concluded that CPD and professional competencies are essential elements for work engagement of librarians in federal universities in North-West, Nigeria. The management of federal universities in conjunction with the federal university libraries in North-West, Nigeria should sponsor librarians to further education, attend seminars, workshops and conferences regularly. Also, librarians should actively participate in web-based CPD programmes.

Keywords: Continuous professional development, Job demand, Job resources, Librarians Work engagement, Professional competencies, University libraries.

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ABBREVIATIONS AND SYMBOLS

AR	Adjusted R
ALA	American Library Association
BUHREC	Babcock University Health Research Ethics Committee
β	Beta
CARL	Canadian Association of Research Libraries
COP	Communities of Practice
CPD	Continuous professional development
DF	Degree of freedom
ICTs	Information Communication Technologies
IFLA	International Federation of Library Associations
JD-R	Job Demands and Resources
KMO	Kaiser-Meyer-Oikin
LRCN	Librarians' Registration Council of Nigeria
MOOCS	Massive open online courses
NLA	Nigerian Library Association
NASIG	North American Serials Interest Group
%	Percentage
PLEs	Personal learning environments
SPSS	Statistical Package for Service Solution
USA	United States of America

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- I. Informed Consent Form
- II. Questionnaire
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CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Work engagement is one of the central priority of human resource managers particularly in the modern years because it is a good indicator of organisational outcomes, performance and profitability. It has turned out to be an exclusive core concern of personnel officers and high-ranking administrators in our organisations. The complication and enlarged rivalry in the 21st century establishments have led to an urgent need for planned work engagement in the global labour scheme. Highly engaged employees are essential resources of each organisation. Hence, work engagement is fundamental to the continuous survival and sustainable development of University libraries in Nigeria in the face of a gradually viable academic environment. Work engagement is considered as optimistic behaviour or a constructive state of attention at labour that results in progressive work associated consequences. Highly engaged workers are active and devoted to their labour. The contribution of engaged librarians towards the effective and efficient management of a library cannot be overstated. Work engagement permits librarians to exhibit creativity, positive behaviour, learning and motivational capabilities. They display a satisfied state of mind in doing a specific given job with the required energy and the enabling abilities to accomplish the preferred organisational outcomes. Engaged librarians are known for positive approaches to work, positive mind-set, higher levels of psychological well-being, and increase in employees' ability and organisational job performance (Satata, 2021; Akinola, 2020). These statements demonstrate that librarians, who are completely engaged to their work, are typically ardent about it, they have good condition of health, they have less family crises and they are happy employees. Highly engaged workers are active and devoted to their job and submerged to their various schedules. An engaged staff is the one who is physically, mentally and ardently involved and keen around his/her labour and always defends the interests and ideals of his/her organisation. Furthermore, due to their trustworthiness to new understandings, engaged staff show extra imaginative notions and are perhaps to be extra ground-breaking and more risk-taking (Sittar, (2020). Ogbonnaya, Daniels and Nielsen (2017) define work engagement as a procedure by which the employees of an establishment are carefully and tactically stimulated to be included and fervent to the organisational aims, objectives and beliefs. Khan (1990) conceptualises work engagement in line with psychological condition as the connecting of

organisational personnel to their labour responsibilities. He added that, in work engagement, individuals work and expresses themselves bodily, intellectually, and enthusiastically during role performances. Akinola (2020) describes work engagement as a condition of cognizance in which employees regard their day-to-day work schedules to be generally significant, feeling optimistic about their job, and are involved in, dedicated and excited as well as passionate about their job. It give workers the required working capabilities to labour for the organisation with clear job characteristics for preferred organisational outcome while being engaged on the job. In the context of this work, work engagement refers to a process whereby librarians in universities in North- West Nigeria are well-equipped with sufficient job resources to satisfy their job demands physically, psychologically, socially, intellectually and emotionally. Job resources refer to the physiological and psychological traits of the work that minimises job demands and enhance organisational output besides workers development. The adequacy of job resources facilitates librarians commitment with a positive attitude to work achievement since they are satisfied. Job demands are the stressors placed on the worker via workload and inter-personal interactions. Job demands according to House (2018) are the only variable that influences emotional exhaustion (burnout). It is essential for librarians in university libraries to be well-equipped with the sufficient job resources to satisfy these job demands and enable higher work engagement. Engaged librarians are vital toward the survival and development of university libraries. Sofian (2016) posits that in this current highly competitive market environment it is nearly impossible for any organisation to survive and function well without highly engaged personnel. Every establishment wants to make the best use of its workforce for the accomplishment of competitive advantage and attainment of the organisational aims and objectives. When personnel are affianced in their job, they get good rapport with their colleagues and working environment turns to be enhanced, happier and healthier, it also translates to higher productivity, profitability, efficiency, and effectiveness in the organisation (Garg, Dar & Mishra, 2018). Furthermore, Adekoya, Jimoh, Okorie and Olajide (2019) emphasises that high level of work engagement in organisations stimulate retaining of talent, facilitates customer faithfulness and increase organisational performance and shareholder significance. Work engagement gives a central role in the organisation toward the improvement of individual performance which consequently can be responsible for job satisfaction (Garg, Dar & Mishra, 2018). No organisation can survive in the 21st century without giving much attention to creativity and innovation. Kartal (2018 and Olajide (2019) postulate that a very much engaged personnel can increase invention,

production and bottommost performance and thus enable workers to be more devoted to the establishment. Work engagement is important in university settings as Alzyoud, Othman and Isa (2015) advocate that, a highly engaged academic work force deciphers improvements in productivity and a boost in the image of their respective universities. It is therefore crucial for librarians in university libraries to be fully engaged in their work so as to provide library and information services for a good learning environment for patrons as well as to carry out research that will facilitate the rapid development of the society.

On the other hand, Gallup (2017) reports that eighty five percent (85%) of the global workforces are not engaged and in sub Saharan Africa the report further reveals that only seventeen percent (17%) of their workforce are engaged to their work. This portrays an alarming situation with a clear indication for the managers to act upon this situation and considerably improve work engagement in their various domains. Establishments with disengaged personnel experienced waste of exertion and unproductive capacity, receive less guarantee from the workers, suffer increased absence and have fewer patron orientation, less production, and condensed functioning and net turnover margins (Stevenson, 2019). Literature and observation by the researcher also reveals that there is low level of work engagement among librarians (House, 2018; Demisse, 2019 & Ajibola, Mukulu & Siyimu, 2019)

Work engagement of librarians in federal universities in North-West, Nigeria will be measured with job demand and job resources. Each profession and work situation incorporates some features that can be categorised into two: job resources and job demands. Job resources include: physical, cognitive and emotional resources. While job demands comprise quantitative, cognitive, physical and emotional job demands. Researchers such as Johnson, Park & Bartlett: Singh & Shukla, 2018 have established that, there is a significant correlation between continuous professional development (CPD) and work engagement. The introduction of ICTs and the implementation of digitization, Internet, mobile library services, multimedia services and other technologies into university library system and services have prompted development and dramatic changes in information service delivery and communication procedures. To cope with these situations in university libraries, librarians must be highly engaged in to their job. Continuous professional development (CPD) programmes allow skills and knowledge acquisition, train and retrain librarians on these innovations. Ukachia and Onuoha (2014) state that more than ever before, there is now a universal attention in innovative and creative services provision along with CPD in our

libraries. Acquisition of additional knowledge, skills and expertise by workers in service to other individuals is a supporting aspect of the employee engagement level (Johnson, Park & Bartlett, 2018). Continuing professional development (CPD) is the process of making sure that individual worker has the opportunity to stay current with developments, knowledge, skills and constantly learn and advance their potentials and professional understanding. CPD can also be defined as the action we take to sustain, update and develop the knowledge and skills essential for our professional job. As the name implies, it is an on-going obligation as long as we remain in our various professions. CPD is an obligation for each librarian to participate in it, so as to update their skills, knowledge and learn new ideas and skills for higher quality service delivery. It has been enumerated as one of the eight (8) guiding declarations in the Code of Ethics of the American Library Association (ALA), The ALA Professional Ethics (2017) code states, “We struggle for distinction in the profession by continuing and improving our own Know-how and expertise, by inspiring the professional development of colleagues, and by nurturing the objectives of prospective participants of the occupation”

Continuous professional development is very crucial for academic librarians particularly those working in Nigerian university libraries, it improves upon their existing knowledge, experience, education and learn more and update their skills and expertise (Sewant, 2016). Furthermore, Adamu, Udoudoh, Babalola and Yusuf (2021) state that some of the benefits derived from continuing professional development by the information managers of which librarians are one are: job enhancement, higher performance and modernized skills and knowledge leading to the enhancement of essential competencies. CPD is very important in the working career of academic librarians; it permits a professional to perform his responsibilities effectually and proficiently. Garst, Baughman, and Franz (2014) enumerate the various advantages of employees continuous professional development which comprise staff retention, better-quality healthiness and protection, condensed pressure, headship sequence, enhanced application of materials, enhance programme quality, lower contracting and co-ordination fees, enhanced work gratification, and extra speedy and effective organisational transformation.

Sreeleakha and Manikandan (2015) postulate that scholars have also established that professional development facilitates better content proficiency, decreases obstacles to achieving results, grows certain skills in staff, changes separable and group perceptions of

the world that increases decision making, and advancements practice via licensure and certification in precise competencies. In an age of growing opportunities, challenging priorities and insufficient resources in our organisations, Sreeleakha and Manikandan (2015) further stress that continuous professional development openings changed at a speedy rate with novel tactics. Hence they recommend the use of communities of practice (COPs), blogs, personal learning environments (PLEs), and massive open online courses (MOOCS) for CPD. Likewise Hornung (2015), Khalid and Strange (2016) recommend that librarians should arise to discover additional CPD channels such as participating in webinars, utilising virtual training centres and YouTube educational videos. Hence, the following indicators will be used to measure continuous professional development in this study: Education and training.

Education is the process of obtaining knowledge, skills, ethical character, beliefs, and lifestyle. Educational approaches encompasses of instruction, training, discussion, storytelling and directed learning. Education generally takes place under the guidance of teachers, counselors, instructors and lecturers. Nonetheless, learners can also learn on their own. Education can take place in formal or informal backgrounds and any experience that has influential effect on the way one reasons, senses, or performances may be regarded educational. Training is arrangements with developing a particular skill to a wanted level via teaching and rehearsal. It is a very valuable technique which can elevate workers to a point where they can make their labour successfully and industriously. Training is the process of amassed the knowhow and talent of a worker for undertaking a specific work. It also connotes to instruction and knowledge accomplishments conducted purposely to assist workers of any establishment to gain and apply the information, capabilities and assertiveness vital for a specific task and establishment.

Professional competencies are regarded as tools used by organisations, human resource managers, and professional bodies or associations, as well as educationalists in the planning, employment, performance appraisal as well as training and development of personnel in organisations. It is mandatory for every individual staff in any organisation to be efficacious and excel in a given profession or vocation. They serve as the brain behind for proficiency standards that suggest the level of understanding, talents, and abilities needed to succeed in the work station and possible measurement standards for determining competency standards (Sani & Musa, 2019).

They are viewed as the situation or feature of being qualified to accomplish a specific job effectively. Professional competencies denote to a standardised responsibility for an individual staff to perfectly perform a particular task (Lanzuela, 2018). It encompasses a combination of knowledge, skills and behaviour employed to improve performance. Professional competencies according to Singh and Kumar (2020) denote to group of unified abilities, attitudes, commitments, knowledge and other definite attributes of personalities or groups of personalities indispensable in a particular job environment. It is a set of attributes that associate with workers performance. It is the feature inside an individual that controls the performance of that person to the aim of the organisational setting. It also controls somebody's purpose in the direction of the needed consequences and capacity to exceed others (Tanloet & Tuamsuk, 2011). Professional competencies can also be considered as a cluster of interrelated understanding, skill, and attitude that affects a major part of an individual employee work and highly associated with work performance. It can be measured alongside with the established standards, and can be developed through teaching and continuing development. It is a behaviour that workers must possess or acquire as input for the achievement of high level of performance in every organisation. It gives a clue to the employee on the areas and stages of performance that he is expected to carry out in a particular job. It is like a chart that displays the types of behaviour that are appreciated, recognized, and in some organisations, rewarded as well. A competent worker is defined as an individual who is selected or nominated by the employer to perform specified duties in line with his knowledge, training and his wealth of experience (Johnston & Quigley, 2021).

Oyedokun, Oyewumi Lawal and Medinat (2018) describe librarians' professional competencies as a combination of applied and theoretical know-how, skills, behaviour, and value necessary to enhance upon a performance. Hence, librarians' competencies connote all the necessary knowledge, insolvency, and abilities needed to practice as a librarian or information specialist in different organisations to provide a multiplicity of value-added, modified and higher quality services in the library. Ko (2017) submits that competencies can be applied in organizations for selection and employment, enactment administration, educational training, career progress, and descendant preparation. Competencies are person's internal trait that can increase the individual to perform in a way that is in agreement with the standards. It can be measured and compared with standards. A competent academic librarian possess a higher degree of knowledge, skills, attitudes, behaviour to provide a diversity of

value-added, personalised and higher quality knowledge services to the serving community or organization to facilitate and ensure the ultimate achievement of the motives, goals, mission and vision of their various parent organizations.

Mulder (2017) regards professional competencies as generic integrated and internalized ability to deliver maintainable effective (worthy) performance (including problem solving realizing innovation, and creating transformation) in a certain task situation, professional domain, job, role and managerial and societal context. It can also be seen as clear and multifaceted amalgamation of skills and capabilities that result from a conceptual and functional synthesis of theoretical aspects, linked to disciplinary contents and current experience. Professional competencies can be used to design and develop job postings, position descriptions, training and education programs and performance evaluation programs.

Core competencies for library and information specialist are: Personal and professional Core competencies. Therefore they stressed on the professional and personal competencies as indispensable for each information worker. While, professional competencies deal with a librarian's understanding in the field of library resources, information provision, ICTs, administration and research together with the capacity to apply these field of expertise as a foundation for giving library and information facilities.

Work engagement of librarians can be enhanced through professional competencies, if librarians have the basic skills and knowledge required to perform their job, they will be engaged to their job. Muhandi (2019) found that, there is association between professional competencies and work engagement. Abotalebi and Biglu (2017) stress that knowledge and skills should be the main focus in considering professional competencies. They further remark that professional competencies are directly associated with performance and organisational task accomplished. Librarians must continue to acquire knowledge and skills even after completing professional education so as to maintain professional competencies (Soyemi & Babalola, 2018; Sani & Musa, 2019). That is to say sound knowledge and skills are rudimentary to librarians professional competencies. It is very essential for librarians to obtain the essential competencies as an aspect of struggle with other professionals. The future of libraries will be assured in the contemporary information society era if, librarians have the required proficiencies that will permit them function effectively (Ibegbulam & Echezona, 2019).

Moreover, the university library atmosphere is moving from a silent zone to a patron friendly and relaxation centre. Emezie (2018) remarks that the novel library setting must be primarily a social get-together apartment, with enough tea and soft drinks, slightly noisy, and a capacious surroundings with state of the art gadget to attract users. This reveals that present libraries are now beyond reading rooms alone but knowledge centres where users meet to partake in conferences, group discussions and teachings. Nowadays patrons can play different games, watch television and listen to music in the library. Further than the physical visitations, social media are engaged to permit message and deliver communicating services. These modernizations are yielded by the power of ICT. Thus, libraries cannot achieve this without highly engaged librarians with the required professional competencies.

University libraries information contents are being converted from print to electronic resource which leads to the growth of information dissemination and effective service delivery. Information is disseminated speedily around the globe as a result of development in the channel of communication which is influenced by the application of ICT gadgets in delivering library activities and subsequently it render service provision quicker and well-organised (Oyedokun, Oyewumi, Akanbi & Laaro 2018). University libraries are more furnished with various information structures above any other category of libraries, on the other hand, there is no library no matter how well equipped it is that do not require the services of competent librarians for effective management. Raju (2014) establishes that library personnel must be competent in digitization, metadata construction and administration, safeguarding of digital resources and computer literate, which are required to function in a virtual setting that provide enhanced services. On the other hand, Delong (2020) mentions the proficiencies for research and academic librarians as follows: Active erudition and reworking, partnership, discussion and communiqué, curation and preservation, impartiality, multiplicity and accommodative, commitment and involvement, appraisal and valuation, management and facilitation, visualisation and invention.

Competencies will be measured with these indicators knowledge and skills in this study.

Knowledge: Knowledge connotes to an organised body of values, facts theories and practices which constitutes the foundation for a given field of human endeavour. It is integrated information in a certain labour areas.

Skills: Refers to the use of know-how and knowledge to carry out a definite corporeal or intellectual job.

A librarian is a professionally trained individual who oversees the library or information centre, acquiring, processing, conserving and giving access to information resources of various formats both physically and virtually to the patrons. Librarians hold graduate or postgraduate certificates in library and information studies and are professionals in the field of librarianship. According to Ezema, Ugwu and Ugwuanyi (2014) librarians are professionally trained persons accountable for the upkeep of a library and its activities, comprising the processing, selection, acquisition and organisation as well as information provision, teaching, and charging and discharging services to satisfy the diverse information needs of its patrons. Additionally librarians are intermediaries between various information resources and the diverse library patrons.

Universities comprise learners, scholars as well as researchers interacting and working together for the advancement of teaching - learning, research and community services. They are warehouse of knowledge, knowledge generation centres and facilitators of learning. Knowledge-generation, knowledge-dissemination, teaching and learning, advancement of knowledge through community service, leadership training are the basic functions of universities. The University library is expected to assist in achieving these goals. University libraries are the types of libraries found in universities. They are repositories of wisdom of great intellectuals of the past and the present. Their materials and services are intended to support the academic programmes of the parent institutions as well as provide community services. That the library is the cornerstone of the tertiary institutions, the pivot around which all teaching evolves is widely recognised by scholars (Okafor, 2011, Kasa, Allahde & Ladipo, 2021).

Therefore, it is apt to say that no university can exist without a good library since their main objectives are teaching, learning, research and community services. Emezie and Nwaohiri (2017) emphasize that an operative university library organisation is an indispensable requirements for research and development in every field of study. University libraries should select, acquire, process and disseminate complete, accurate, timely, adequate and relevant information in all formats to the members of the university community failure to do so, may lead to substandard teaching, learning, research and community services which consequently may endanger national growth and development. Caroline and Adewale (2018) stress that

libraries should provide relevant resources for information acquisition, leisure, individual benefits and interactive relations for members of the serving community. More so, library allows person to acquire spiritual, inspirational, and recreational activities via reading, and socialization in an encouraging environment, thus, providing the opportunity for relating with the society's wealth and accumulated knowledge and experiences.

In recent years, the Nigerian university system has been going through a fundamental transformation, there has been an increase of demands in universities due to decrease in government financing of public universities, increase in students population, increased focus on quality research and teaching, competition and technological advancement (Ohghenekaro, 2017). Traditionally, the services of the university library include: cataloguing and classification services, circulation services, reference and information services, inter library loan, patron instruction, abstracting and indexing, information services and research and bibliographic services. However, quick developments in Information Communication Technologies (ICTs) have transformed the roles of the university libraries worldwide in providing library information services to their patrons; owing to this development they are facing new challenges and expectations which demand highly engaged librarians with new skills, and knowledge. Accomplishing the set objectives depends largely on the level of work engagement possessed by the librarians in this contemporary digital age.

Emezie (2018) states that the 21st century has frequently been pronounced as the period of digital information thus, creation and utilization of electronic information resources has increased dramatically. The present-day digital information setting has given opportunity for twenty four hours (24) library and information services regardless of time or distance. In this type of networked environment, traditional approaches to service delivery have transformed into electronic or digital means of service provision. Remarkably, library's manual limits have been transformed into borderless access where patrons can easily get access to library resources from distant places. By these developments, it is unquestionably visible that, the trend has changed in this ICT era. Today's libraries including university libraries are taking their services to millennial and ICT savvy users who now depend on the internet (Emezie & Nwaohiri, 2017). Library patrons are astonished by information explosion and they need complete, dependable, precise, and timely information at the precise time, in the correct format and at the right personal way to satisfy their information needs (Gbaje, 2017). Hence, the central role of the librarians as managers of information resources is quite essential;

nevertheless, for librarians to be able to accomplish these roles successfully, they are required to be highly engaged into their work.

The objectives of university libraries are to facilitate teaching, scholarship, investigation and communal services. These goals cannot be attainable without engaged librarians with high interest to work for the organisation, when librarians in university libraries are highly engaged to their labour, they possess respectable affinity with their colleagues and work atmosphere turns to be improved, happier and healthier which subsequently leads to higher performance, productivity, efficiency, and effectiveness in the universities. The dynamic nature of university libraries caused by the introduction of ICTs, the application of the Internet, digitization, mobile library services, multimedia services and other technologies into university library system and services has compelled librarians to be more competent. More so, there is a speedy increase in technologically savvy users with diverse information needs. To cope with these situations in university libraries, librarians must possess higher level of work engagement and this cannot be possible without professional competencies by possessing expertise and understanding required for dynamic university library work. The acquisition of new skills, knowledge and competencies can be realised through efficient continuous professional development programmes. This study therefore, examined continuous professional development, professional competencies and work engagement among librarians in federal university libraries in North – West, Nigeria

1.2 Statement of the Problem

Work engagement is one of the main priorities of personnel managers and administrators in the contemporary era because it is a good predictor of work outcomes, organisational success, profitability, efficiency, effectiveness and performance. When workers are fully engaged they are more creative, advanced and facilitate development that allows establishments to progress positively over time with innovations in services and products. Adekoya, Jimoh, Okorie and Olajide (2019) emphasis that highly engaged workforce in organisations stimulates retaining of talents, facilitates patron trustworthiness and improves organisational performance and interested party importance.

Gallup (2017) reported that 85% of the global workforce is not engaged and in sub Saharan Africa the report further reveals that only 17% of their workforce is engaged to their work. According to Demisse, (2019); Oladejo & Kareem (2019) ; Ajibola, Mukulu & Simiyu,

(2019) there is low level of work engagement among librarians in federal university libraries in North-West, Nigeria. This will affect their creativity, innovations, competitive advantage, productivity and efficiency.

It appears that librarians in federal universities in North-West, Nigeria do not frequently participate in continuous professional development which might improve upon their work engagement. Similarly, professional competencies of librarians in federal universities in North-West, Nigeria have not been fully explored to improve upon their work engagement. However, the researcher is of the view that continuous professional development of librarians in federal universities may improve their work engagement through education and training which will allow them to learn and update new skill and knowledge. Possession and application of professional competencies via required knowledge and expertise needed to carry out their job by the librarians on the other hand, may improve upon their work engagement. Hence, the researcher is set to find out the influence of continuous professional development and professional competencies on work engagement of librarians in federal universities in North-West, Nigeria.

From the literatures reviewed, many studies have been conducted on continuous professional development and competencies. But there seem to be dearth studies that have been carried out on work engagement as a single variable as well as studies that combined it with other variables in Nigeria, specifically, in this study area. A study by Goruda and Siddegoroda (2018), they established that, employees active engagement was among the challenges faced in Mysore and Banqalore cities. Another study conducted by Drimie (2019) in Edo State, Nigeria, revealed that worker engagement is a consequence of establishment- worker relationships; hence the study fails to looks at the level of the employee work engagement in this study locale. Though Akinola (2020) showed a very high degree of work engagement, this, study was carried out in Sourthan part of Nigeria.

Perhaps the low level of librarians work engagement could be attributed to their low level of continuous professional development or their low level of professional competencies. Based on the above premise the researcher found out the influence of continuous professional development and professional competencies on work engagement of librarians in federal universities in North-West, Nigeria.

1.3 Objective of the Study

The main objective of the study is to find out if continuous professional development and professional competencies influence work engagement of librarians in federal universities in North-West, Nigeria. The specific objectives of the study are to:

1. determine the level of work engagement of librarians in federal universities in North-West, Nigeria;
2. find out the level of continuous professional development of librarians in federal universities in North-West, Nigeria;
3. find out the level of librarians professional competencies in federal universities in North-West, Nigeria;
4. determine the influence of continuous professional development on work engagement of librarians in federal universities in North-West, Nigeria.
5. determine the influence of librarians' competencies on work engagement of librarians in federal universities in North-West, Nigeria;
6. find out the relative influence of continuous professional development and librarians professional competencies on work engagement in federal universities in North-West, Nigeria;
7. find out the joint influence of continuous professional development and librarians professional competencies on work engagement of librarians in federal universities in North-West, Nigeria and
8. identify the constraints to work engagement of librarians in federal universities in North-West, Nigeria.

1.4 Research Questions

The following research questions guided the researcher

1. What is the level of work engagement of librarians in federal universities in North-West, Nigeria?
2. What is the level is of continuous professional development of librarians in federal universities in North-West, Nigeria?
3. What is the level of librarians professional competencies in federal universities in North-West, Nigeria?
4. What are the constraints to work engagement of librarians in federal universities in North-West, Nigeria?

1.5 Hypotheses

The researcher tested the following null hypotheses, at = 0.05 level of significance:

- Ho₁** Continuous professional development of librarians in federal universities in North-West, Nigeria will not significantly influence their work engagement.
- Ho₂** Librarians professional competencies do not significantly influence their work engagement in federal universities in North-West, Nigeria
- Ho₃** Continuous professional development and librarians professional competencies will not relatively influence their work engagement in federal universities in North-West, Nigeria.
- Ho₄** Continuous professional development and librarians competencies will not jointly influence their work engagement in federal universities in North-West, Nigeria.

1.6 Justification of the study

Work engagement is critical to the actualization of the obligations of any organisation. In the current competitive global work environment it is impossible for organisations to survive and function well without highly engaged employees. That is why an increasing global concern is increasing in a jet speed towards the concept of work engagement particularly among human resources managers in organisations. A highly engaged workforce increases creativity, innovation, productivity and performance and allow the workers to be more dedicated to the organization. No organisation can survive in the 21st century without giving much attention to creativity and innovation. Adekoya, Jimoh, Okorie and Olajide (2019) postulate that a very much engaged personnel can increase invention, production and bottommost performance and thus enable workers to be more devoted to the establishment. Work engagement is important in university settings as Alzyoud, Othman and Isa (2015) advocate that, a highly engaged academic work force translates improvements in productivity and a boost in the image of their respective universities.

The condition of librarians work engagement in Nigerian universities is worrisome as the level of work engagement of librarians is believed to be low as shown by many empirical studies (Oladejo & Kareem 2019; Ajibola, Mukulu & Simiyu, 2019). This trend is also observable in federal universities in North-West, Nigeria. The researcher has carefully observed the phenomenon of work engagement of librarians in federal university libraries in North-West, Nigeria and realised from experiences and contact with professional colleagues that, work engagement which ought to be one of the central obligations of librarians appears

to be low. Observation by the researcher in the study locale reveals that there is absenteeism, lateness, fatigue, cynicism, inefficacy and turnover intention among the librarians which are clear indication of poor or low work engagement in organisation. Most of the librarians come to work late and close before the official closing time, in most of the technical service divisions many information resources were kept for long period of time neither catalogued nor classified, books were seen on the readers' tables unshelved. Moreover, users put in their request in the virtual library services channels for hours unattended. Likewise many librarians abandon their job for greener pastures. From the literature reviewed for this study it appears that there dearth of literature and empirical investigation on CPD, professional competencies and work engagement, hence, this justify the needs to carry out an empirical study on CPD, professional competencies and work engagement of librarians in federal universities in North-West, Nigeria to generate information that will serve as guide or tool to librarians, personnel managers, policy makers and researchers in quest to improve the level of work engagement as well as performance in organizations. The result of this study is important particularly to the university management, personnel managers, library administration, librarians and other researchers. On the other hand, there is lack of literature on continuous professional development, professional competencies and work engagement of librarians.

This study would serve as a research/reference source for further enquiry and study by human resource managers, researchers and librarians who may have interest to further their quest for knowledge, concept and theories on examining continuous professional development, professional competencies and work engagement. The study will also provide an empirical awareness on work engagement profile of librarians in federal universities in North -West, Nigeria. It will also elucidate the continuous professional development and professional competencies components that boost employee work engagement which may subsequently improve performance, productivity, creativity, innovation and service quality in Nigeria, particularly in federal universities in North-West, Nigeria. This study will also be very valuable and important because it will assist in solving the dearth of literature in CPD, professional competencies and work engagement. The outcome of this research will make available theoretic and conceptual proof on CPD, professional competencies and work engagement of librarians to upcoming researchers.

1.7 Scope of the Study

The research focussed on continuous professional development, professional competencies and work engagement of librarians in federal universities in North-West, Nigeria. Where the independent variables focussed on continuous professional development and professional competencies, the dependent variable is work engagement. Continuous professional development encompasses education and training while professional competencies comprise knowledge and skills and work engagement is measured in terms of job demand and job resources. Any other aspect of the variables not mentioned here were not included. Respondents were professional librarians in the federal university libraries in North-West, Nigeria which comprises Ahmadu Bello University, Zaria, Federal University, Birnin Kebbi, Airforce Institute of Technology, Kaduna, Bayero University, Kano, Federal University Gusau, Nigerian Police Academy Wudil, Nigerian Defence Academy Kaduna, Usman Danfodiyo University, Sokoto and Federal University Dutse, Federal University Dutsin-ma. Studies have been conducted in Nigerian university libraries but to the best of the researcher's knowledge, there was dearth in literature on the variables of this present study in federal universities in North-West, Nigeria.

1.8 Significance of the Study

The study is significant in several contexts, in the sense that, the outcomes of the research could be beneficial to the university management, personnel managers, library administration, librarians and other researchers. On the other hand, there is lack of literature and empirical investigation on the continuous professional development, professional competencies and work engagement of librarians in federal universities in North-West, Nigeria. The researcher realised from personal experiences and contact with professional colleagues that work engagement which ought to be one of the central obligations of librarians appears to be low. Studies have been conducted in Nigerian university libraries but to the best of the researcher's knowledge, there was dearth in literature on the variables of this present study in federal universities in North-West, Nigeria. Hence, the choice of federal universities in North-West, Nigeria.

This study is expected to serve as a research/reference source for further enquiry and study by human resource managers, researchers and librarians who may have interest to further their quest for knowledge, concept and theories on examining continuous professional development, professional competencies and work engagement. The study will also provide

an empirical awareness on work engagement profile of librarians in federal universities in North -West, Nigeria. It will also elucidate the continuous professional development and professional competencies components that boost employee work engagement which may subsequently improve performance, productivity, creativity, innovation and service quality in Nigeria, particularly in federal universities in North-West, Nigeria. This study is expected to be very valuable and important because it would assist in solving the dearth of literature in CPD, professional competencies and work engagement. The outcome of this research will make available theoretic and conceptual proof on CPD, professional competencies and work engagement of librarians to upcoming researchers.

1.9 Operational Definition of Terms

The operational definition of terms explains the applications and use of terms in the scope of this study.

Continuous professional development: In the context of this work refers to the process of ensuring that librarians working in federal universities in North- West Nigeria have the opportunity to further their education and receive various training to remain current with new developments in their knowledge and skills so as to progress in their skills and continuously improve and advance upon their potentials and specialised knowledge.

Librarians: These are professionally trained personnel in library and information studies who acquire process and provide access to information resources in different formats, both physically and virtually. They usually possess graduate or postgraduate qualifications in information resources management.

Professional competencies: This refers to the skills and knowledge acquired by librarians in North- West Nigeria to sufficiently carry out specific tasks in the university libraries.

University: Refers to an institution of higher learning that award a minimum of bachelor's degree.

Work engagement: This refers to a process whereby librarians in universities in North- West Nigeria are well-equipped with sufficient job resources to satisfy their job demands physically, psychologically, socially, intellectually and emotionally.

CHAPTER TWO

REVIEW OF LITERATURE

The chapter deals with literature review which is significant to this research. It is regarded very vital since it provides a solid foundation for comprehending the basic and essential concepts, ideas and thought associated to the variables of this study. The it is conducted underneath the subsequent sub-titles:

- 2.1 Conceptual Review
 - 2.1.1 Concept of Work Engagement
 - 2.1.2 An overview of Continuous Professional Development
 - 2.1.3 An overview of Professional Competencies
- 2.2 Empirical Review
 - 2.2.1 Work Engagement in Organisations
 - 2.2.2 Continuous Professional Development of Employees
 - 2.2.3 Professional Competencies of Employees
 - 2.2.4 Professional Competencies and Work Engagement in Organisations
 - 2.2.5 Continuous Professional Development and Work Engagement in Organisations
 - 2.2.6 Summary of Empirical Review
- 2.3 Theoretical Frame Work
 - i. Job Demand and Resources (JD-R) Model of Work Engagement
 - ii. Human Capital theory
 - iii. Iceberg competency model
- 2.4. Conceptual Model for the Study
 - Description of Conceptual Model for the Study
- 2.5 Appraisal of Literature

2.1 Conceptual Review

This section reviews related works on the major concepts of the study, by providing the conceptual basis for understanding the influence of Continuous Professional Development and professional Competencies on Work Engagement of librarians

2.1.1 Concept of Work Engagement

Work or job engagement means the degree to which workers devote themselves with their complete energies to work related activities. Work engagement is further described as a self-assured conduct or an optimistic state of mind at labour which delivers to successful job-interconnected outcomes (Taha & Shinwoo, 2019). Highly engaged workers are active and devoted to their job and submerged to their various schedules. Khan (1990) conceptualises work engagement as the connection of organisational associates to their job functions. He stated added that, in engagement workers express and employ themselves actually, intellectually and passionately throughout role recitals.

An engaged staff is the one who is physically, mentally and ardently involved and keen around his/her labour and always defends the interests and ideals of his/her organisation (Nyen & Phan, 2020). Wellins, Bernthal, and Phelps (2011) submit that work engagement is the degree of how individuals appreciate and trust whatever they carryout and sense respected for undertaking it. Contributing to this, Schaufeli et al. (2010) as mentioned in Kantal (2018) regards work engagement as optimistic, satisfying, job-associated condition of mind which is branded by energy, commitment, and concentration. Sittar (2020) view work engagement as the capability to arrest the craniums, minds, and passions of your workforces to inspire an inherent craving and passion for superiority work as well as the attainment of organisational aims and objectives. Work engagement is described as a condition of heart, in which staff regards their every routine to be feeling confident about their job, dedicated to, personally significant, and are involved in, excited and ardent about their work. The term, work engagement, provide employees with the preferred operational abilities to work for the organisation with vibrant job features for preferred managerial result despite the fact essentially engaged on the work (Akinola, 2020). Contributing to this, Ogbonnaya, Daniels and Nielsen (2017) define work engagement as a procedure by which the employees of an establishment are carefully and tactically stimulated to be included and fervent to the organisational aims, objectives and beliefs.

Schaufeli, Salanova, González-Romá & Bakker in 2002 developed an instrument for measuring work engagement they are: strength, devotion and fascination. Vigour can be identified with high amount of energy and intellectual flexibility when performing, the readiness to bestow strength in one's labour. Dedication was considered as a sense of meaning, keenness, encouragement, superiority, and challenge. And Absorption was categorised as being completely focused and extremely busy in doing his job, time passes speedily and one has difficulties in unravelling oneself from his labour. Harter, Khan and Yusoff (2016) used the gratification-engagement to test engagement, which they regarded as the personality's participation and gratification with, and zeal for labour. Work engagement is an appropriate and noble interpreter of workers, group, and organisational outcomes. Since their robust commitment to and attentiveness to their job, engaged staff manifest improved in-role job performance and similarly they got superior economic results (Gupta & Shaheen, 2017). Furthermore, due to their trustworthiness to new understandings, engaged staff show extra imaginative notions and are perhaps to be extra ground-breaking and more risk-taking (Adekoya, Jimoh, Okorie & Olajide (2019). In addition to this specific-degree of presentation results, engaged personnel are more responsible to support their contemporaries regularly.

There are three types of degree of workers work engagement in organisations namely: a. Engaged workers b. Not engaged workers and c. Actively disengaged workers. Engaged workers in organisations carry out their duties with strong craving and feel a deep associated to their organisations, they appears to be creative, ground-breaking and contribute towards uplifting the standard of organisations. Not-Engaged employees are fundamentally checked out. These categories of workers are sleepwalking via their workday to wave away time, but they did not put their effort or craving into their daily job. While actively disengaged workers are not only unfortunate at work but then again they are demanding out and manifesting their sadness. Day by day, these workers challenge what their engaged co-workers accomplished (Martins, 2019, Ryan & Deci, 2020). Moreover, Gallup (2017) acknowledged that disengaged workers are less industrious, less dependable, unhappy, and often uncertain about the prospects of their job. There are several determinants of work engagement in organisations. Chiwawa and Wissink (2020) maintain that the determinants of employee engagement are organisational climate, organisational learning, leadership style,

workers respect, pay and benefit rewards, information and communication, workers wellness and training and development.

According to Anitha (2014) there are seven (7) factors of work engagement these are: work setting, management, group and working mates, training and job improvement, reward, managerial guidelines and workstation comfort. Nguyen and Pham (2020) recognised leadership, job design, education and improvement, respect, and labour life stability as facilitators of job engagement in organisations. Additionally Armstrong & Taylor (2014) recommended job design, learning and development, performance management, and reward packages could strengthen work engagement in establishments. Another method to study drivers of employee engagement is suggested in Job Demands-Resources (JD-R) model. It presents notion of job resources, which reflects what activates a motivational procedure in human resource, and can be found in the following features: job assignment (skill diversity, tutoring, and job importance); job strategy (role transparent and independence); social set-up (assistance from aristocracies and immediate supervisor); and organisational upbringing (expansion opportunities and job security) (Bakker & Demerouti, 2007 as cited in Nguyen and Pham, 2020).

Chiwawa and Wissink (2020) maintain that the determinants of employee engagement were workers respect, organisational learning, communication, leadership style, pay and benefit rewards, information and organisational climate, workers wellness training and development. Robert and Marwick (2009) identified six (6) factors that limit work engagement in organisation: Job uncertainty, injustice, typically in payment and reward systems, repetitious labour, highly demanding work, and bad line administrative actions and intimidation, working for long periods of time without a pause. There are some major issues which lead to work engagement in establishments also there are several barriers to work engagement in small and medium scale enterprises such as work engagement is a misunderstood concept by many workers and lack of work life balance (Khanday & Pooja, 2021). More so, Boyd (2020) identified relationships, leadership behavior, and effective communication as strategies used by small business leaders to improve workers engagement. Some of the mostly identified features of work engagement are: career progression, good management, enablement, esteem, equivalent chances & justice, performance evaluation, remunerations, wellbeing and Safety, job gratification, effective communication, family openness and teamwork (Narasimha, Srinivasa & Niranjana, 2020). On the other hand, Maya and Kavitha (2019) state that work

engagement can be enhanced in organisations if workers are highly recognised than any other factor and a substantial supporter to organizational upliftment.

Work engagement was measured with Job-demands Job resources model of work engagement:

Job demands

- a. Quantitative demands
- b. Cognitive demand
- c. Emotional demand
- d. Physical demands

Job resources

- a. Physical job resources
- b. Cognitive job resources
- c. Emotional job resources

Job demands: Job demands are the stressors placed on the worker via workload and interpersonal interactions. Job demands according to House (2018) are the only variable that influences emotional fatigue (burnout). It is essential for librarians in university libraries to be well-equipped with the sufficient job resources to satisfy these job demands and enable higher work engagement. It includes bodily, psychosomatic, social, or organisational features of the job that need continual corporeal and/or psychological exertion or expertise. Consequently, they are connected with definite physiological and/or psychosomatic expenses. They comprises of the following aspects: physical demand, emotional demands, cognitive demand and quantitative demand.

- a. Quantitative demands: means the amount of work assigned or carried out by a worker in an organisation. It can be high, moderate or low.
- b. Cognitive demand: the need of the worker to do mental reasoning, thinking and apply his mental abilities to his job.
- c. Emotional demand: this refers to responsiveness, expressiveness of feeling, thought, sadness, happiness as it affects ones job particularly to users.
- d. Physical demands: refers to the bodily requirements of the job such as standing for hours, sitting for long time, carrying heavy loads, operating a machine or tools.

Job resources: Job resources refer to the physiological and psychological traits of the work that minimizes job demands and enhance organisational output besides workers development. The adequacy of job resources facilitates librarians commitment with a positive attitude to

work achievement since they are satisfied. physical, psychosomatic, social, or organisational features of the work that are either or: useful in achieving labour objectives; decrease job demands and the accompanying physiological and psychological cost; inspire individual progress, education, and development. Examples are physical resources, emotional resources and cognitive resources.

- a. Physical resources: connotes the availability, suitability, standard and status of working tools, machines, environment of the worker.
- b. Emotional resources: refers to responsiveness, expressiveness of feeling, thought particularly to co-worker and supervisors.
- c. cognitive resources: means resources consulted for the effective and efficient discharge of duties such as handbooks, manuals, internet sources, databases, co-workers and supervisors.

Importance of work engagement

The value of engaged workforces for establishments cannot be overestimated, they serve the following purposes: they facilitate productivity and performance, experience positive emotions regularly, good health condition, cheerfulness, joy, interest, and enthusiasm (Alfifi, Mahran & Alabdulah, 2019). These positive emotions can also enhance workers momentary thought–action choices and it will shape their individual resources such as societal interactions, self-efficacy) via increasing the range of opinions and activities that come to cognizance. Moreover, the feelings experienced by very engaged workers are high in stimulation or initiation (Langelaan, Bakker, Schaufeli, & Van Doornen, 2016). Scholars regarded distress and feelings as a part of the two orthogonal axes, preference, and beginning. The pleasure side recapitulates at the degree of individual understanding how one is sensitive, while the orthogonal activation side denotes to a sense of generation of effort. Undesirable affect and desirable affect can be explained by using these two axes whereby undesirable affect is featured by sensation such as annoyance, anxiety, tenseness, and personal worry. On the other hand, desirable affect is observed by feelings like keenness, vigour, and joyfulness.

Engaged workforces are categorised by higher positive affect and to a slightly lesser level by small in negative affect (Langelaan, Bakker, Schaufeli, & Van Doornen, 2016). Engaged employees are contented with work in their various establishments and dependable to their instant superintendents with a constructive passionate association. Ardently grounded obligation to the job and the organisation lead to advance degree of engagement and obligation based on progressive, monetary, or specialized rewards (Corporate Leadership

Council, 2004). Kim, Tian and Park (2019) stress that engaged workers recorded higher score in additional-role performance scores than those employees who are not engaged. Hence it can be deduced that job engagement bring about organisational residency behaviour as it concentrates on workers participation and safeguards their obligation which completely hinge outside the recommended limits of any organisation. Engaged librarians are creative, innovative, and proactive in behaviour, possess knowledge and reinforcement capabilities. They display a pleased state of mind in executing a certain job with the required vigour to accomplish the top anticipated outcomes for their organisations. They possess a constructive approach and a robust job sympathy which indicated that they are always passionate about their job and hence, they make a respectable relationship with their coworkers which subsequently lead to progressive organisational result. They also have encouraging styles to job, optimistic mind-set, advanced level of mental health, and growth in workers capability and organisational job recital. This statement showed that librarians, who are entirely engaged to their work, are generally zealous about it, they have good healthiness condition and they have less family crises (Akinola, 2020). It can be deduced, from the fore going discussion that, highly engaged employee in any establishment university libraries inclusive are indispensable for proper functioning, performance, productivity, good health as well as the successful fulfillment of organisational mission, vision, objectives and aims.

2.1.2 An overview of Continuous Professional Development

Continuing professional development (CPD) is the procedure via which professionals such as engineers, accountants, lawyers, librarians, doctors and others maintain growth and widen their understanding, skills and advance the individual potentials needed in their specialised work lives. CPD can also be viewed as the mindful bring up to date of specialised understanding and the enhancement of professional proficiency through somebody's working career (Arua, 2019). It is an obligation for being expert, to remain current and uninterruptedly looking for advancement. It is crucial to uplifting a staff career prospects, both presently and for the upcoming. It is the partaking in an activity that boosts or improve the knowledge and talents of an expert in accordance to the job requirements (Lampthey & Corletey, 2011). Continuous professional development of librarians according to Namaganda and Waler (2020) refers to continuing process of sustaining or improving existing proficiencies by developing and broadening of knowledge, abilities and individual capabilities along with

familiarizing with new theories, techniques, and approaches during the period of working career.

CPD of library and information specialists in the view of Walter and Namaganda (2020) is generally promoted by professional bodies such as International Federation of Library Associations (IFLA), American Library Association (ALA), Librarians' Registration Council of Nigeria (LRCN) and Nigerian Library Association (NLA). CPD is a learning process through which memberships of any vocation uphold, advance and widen their understanding, skilfulness and individual potentials central to their specialised duties. It is a universal obligation to organised abilities improvement and individual as well as professional competence. Adamu, Udoudoh, Babalola & Yusuf (2020) define CPD as mindful apprising of professional awareness and the development of specialised competency throughout an employee's working career. It is a strategic to enhancing a individual's career prospects existing and forthcoming. World Federation of Medical Education (2020) view CPD as a form of learning and training, commencing after conclusion of rudimentary professional training graduate programme and subsequently spreading through each doctor's professional working lifetime. Contributing to this Khan (2010) contends that continuing professional development is groupings of methods, thoughts and skills that will help somebody to accomplish his/her own education and professional progression. This can be through formal and informal procedures. Thus, librarians' continuous professional development can be seen as any extra training that librarians go through in order to increase on their talents, appreciate new techniques, and maintain previously learned knowledge and competencies. It comprises of all the categories of enabled education chances, ranging from university degrees to prescribed homework, symposiums, seminars as well as any available informal learning opportunities (Ukachi & Onuoha, 2014).

Continuous professional development has been classified into different categories. According to Oluwusu- Acheau (2017) CPD can be shared into two groups viz: official and informal means. CPD can apparent in various methods from recognized school courses to learning over daily work activities. In its best simply recognized form CPD is possibly the keep informed of expert knowledge through formal, short courses by professional groups such as medical doctors, barristers and educators. Typically these experts possess their own professional bodies or institutes and likely that membership and a working license given by these organisations, it is a precondition for working in the profession (Aslam, 2017) In

another dimension, CPD activities include official/informal or scheduled/supplementary undertakings, such as joining short or long term courses, discussions and seminars, interacting, learning by undertaking, coaching and participating in virtual or offline summits (Varlejs, 2016). Larsen (2006) also classified CPD as in-house and external. In-house CPD comprises of job rotation, mentoring programmes, trial and error learning and reading professional literature. Whereas external CPD consists of educational visits, publishing an article, symposiums, workshops, roundtables and attending further education.

Continuous professional development consists of education and training:

Education is a procedure of obtaining knowledge, expertise, values, ethics, faith, and habits. It takes place formally in schools and colleges or informally at home, with peer group, at work place with working mates and others under the guidance of teachers, mentors, supervisors among others. Though, students can also educate themselves. Adults and children are trained to acquire knowledge and expertise considered essential for the growth and advancement of an individual and the society. Rapid advances in science and technology especially in ICTs have brought about e-learning, e-resource, e-library where an individual can learn virtually and remotely under the guidance of a teacher/librarian.

Training deals with evolving a precise ability to a preferred standard through coaching and rehearsal. It is a very valuable tool which can uplift the status an employee to a standard where they can be an expert and carry out their normal labour commendably and diligently. It is the process of increasing the understanding and expertise of a worker in carrying out a specific task. Training can either be on the job training or off the job training.

According to Ukachi and Onuoha (2014) there are a many of methods to professional development, such as discussion, tutoring, communities of practice, scholarship, coaching, deep inspection and technical support. The various CPD packages consist of: seminar, peer coaching, workshops, conferences, mentorship, courses, symposium instantaneous webinars, and remote learning programs with collaborating abilities. Supporting this assertion, Wusa (2015) also declared these as approaches that can be utilised for professional development among librarians: (i) internal training conducted by senior staff; (ii) provincially delivered training; (iii) training offered by professional bodies; (iv) Institutions of higher education based courses and (v) internet-based learning packages. In the views of Almanthari (2019) CPD includes all official and informal undertakings purposely to upgrade workers experience. Official approaches include a conference, seminar, symposium; the informal

approaches include deliberations with co-workers. Therefore, CPD can occur inside establishments in form of summits, meetings, consultations with contemporaries, observing others, information sharing, and partnership with external organisations in conferences and official visits to other organisations.

There are lots of benefits derived from CPD practices in organisations. CPD serves as an investment that employee makes for themselves for accelerating their career. Valcount (2020) stressed that, it assist staff to develop their specialized efficacy, career prospects and career progression and it also improve staff confidence and strengthens their proficient reliability to equip them for greater everyday jobs. CPD helps staff to be more imaginative in attempting new challenges so as to be able to handle these challenges via frequently bring up-to-date their knowledge and skill. It makes working life for employee more stimulating and can meaningfully increase their job fulfillment and prevent fatigue. From the organisational point of view, CPD can exploit staff potential by connecting learning with engagements and theory with application (Attebury, 2018). This will eventually leads to improved workers confidence and inspired and encouraged personnel that support to offer a confident image or product to organisations (Khan, 2010). More so, Iwuchukwu and Echedom (2020) stressed that some of the benefits resulting from CPD activities by the librarians were job improvement and efficient skills prominent to the required competencies. CPD is very necessary in the working career of academic librarians; it allows a professional to perform his responsibilities effectively and proficiently. They added that the continuous professional development of librarians is a significant subject all over the library domain as a result of massive information and communication technological developments which are producing speedy modifications and changes in the information profession along with the old methods of acquisition, organisation, storing and information retrieval systems have been transformed by supercomputers and telecommunication schemes. The effect of these modifications has started ensuing work-related undesirability, which is not reasonable in library profession (Moonasar & Underwood, 2018)). Academic Librarians in Nigeria work in the traditional and contemporary electronic/digital and hybrid libraries as managers, custodian, and facilitators of information access, retrieval and utilisation thus, they need to be lifelong learners. Continues professional development is very crucial for academic librarians. It assists in improving upon their existing knowledge, experience, education and learns more and update their skills and expertise (Sewant, 2016). The future of libraries in Nigerian University

libraries will be assured in the existing information and communication technology setting if librarians have the needed proficiencies that will allow them to work meritoriously and also competencies are acquired through CPD (Ibegbulam & Echezona, 2019).

2.1.3 An overview of Competencies

Professional competencies are regarded as tools used by establishments, human resource experts, and professional associations, as well as educationalists in the planning, employment, performance and development of personnel in organisations. It is required for every individual staff in any organisation to be efficacious and excel in a given profession or vocation. White (1959) is the first author to publish competency as a concept for performance motivation. However, the present application of competencies was championed by Griffiths and King (1985); they viewed competencies as understanding, skills and attitude. Knowledge denotes understanding, awareness/ thoughtful, undertaking some task, the skill is the capability to accomplish a job meritoriously attitude is about the intellectual/emotional technique of an individual to circumstances. Competencies are subject to interpretations by various scholars and researchers, hence there is no singular, generally recognised definition of the term that has been accepted by the academics, researchers and scholars. Competencies can be seen as the expertise of staff to apply understanding, aptitudes, and abilities needed to effectively perform critical labour functions or jobs in a certain work situation. They serve as the foundation for expertise criteria that postulate the degree of understanding, talents, and capabilities needed to triumph in the work station and possible measurement standards for determining competency fulfilment (Sani & Musa, 2019).

Professional competencies according to Akande, Orim and Olaniyi (2016) are the attitudes and behaviour designs that support how people do their work. It influences how well an individual worker applies his knowledge, technical and management skills. It can be measured and equated to benchmarks. Competencies can be enhanced by training and practice. European e-Competence Framework (2014) defines professional competencies as the proven capability to use information, expertise and assertiveness to attain noticeable outcomes. They further stressed that competencies are not skills; but a competence surrounds skills. While competencies are all-inclusive concepts, skills are particular and certain capabilities. Job outlines combine several competencies, and a particular competence may be allocated to many different work profiles. Competencies are the knowledge, skills, abilities

and behaviour that workers applies in performing his/her job (Canadian General Standards Board, 2009). More so, social Care Institute for Excellence (n.d.) defined competencies as explanations of the talents, savvy, abilities, and special potentials necessary to execute a job responsibility efficaciously. Competencies refer to the capability to carry out a task or labour positively and proficiently. It is the expertise, quality, the capacity require to accomplish a task (Ibegbulam & Echzona, 2019). It also tends to define the degree of proficiency of an individual worker in accomplishing a precise duty or work. Competencies are the capacity, expertise, characteristics know-how of an individual to accomplish something proficiently (Oyedokun, Oyewumi, Lawal & Medinat, 2018).

Professional competencies are combined expertise required by a staff to perform job tasks in a given area of expertise. It was described as the level to which employees can use their work conditions to their specialised understanding, skills, reasons, and personalities and it comprises of advanced expertise, such as critical thinking, cooperation, communication, and everlasting education (Ko, 2017). On the other hand, Mulder (2014) viewed professional competencies as the standard, unified and internalised proficiencies to carry out sustainable and effective performance (including innovation, problem solving and creating transformation) in a particular professional role, field, organisational context, task situation and job. Librarians' professional competencies according to American Association of Law Libraries (2001) are the understanding, talents, and individual characteristics that help to differentiate performance of librarians. They added that competencies can be learned via advanced education such as attending graduate/post graduate programmes, via coaching, experience and via CPD programmes.

Professional competencies are concerned with the librarians' understanding of information assets, access, ICTs, management as well as the capability to apply it as a base for giving the maximum excellence information services (Fernandez & Buenrostro, 2015). Conversely, Oyedokun, Oyewumi Lawal and Medinat (2018) described librarians' professional competencies as a combination of applied and theoretic understanding, abilities, behaviour, and value required increase on a performance. Ko (2017) submitted that professional competencies can be applied in organisations for recruitment and selection, performance management, successor planning, career development, and educational training. It can be deduced from the above that, professional competencies are vital requirement for planning, effective performance, productivity and employee career development.

Types of Librarian's Professional Competencies

Santos (2017) states that information professionals need professional competencies, which is considered as combined expertise required by a staff to perform job tasks in a given area of expertise. Canadian Association of Research Libraries (CARL) (2010) categorised professional proficiencies for librarians working in a research environment like University libraries into seven as follows: Information technology skills, foundational knowledge, information literacy, human relation skills, management, resources development, research and assistances to the job.

According to CARL (2010) the job of the 21st Century information worker remains on a concrete background of professional practice. The fruitful expert advances proficiencies in the following precise areas: Interpersonal skills, management and control, research, data administration and protection and technological compliance. Contributing, Thanuskadi (2015) reported that library and information professionals should possess proficiencies related to: customer service competencies, philosophical proficiencies, educational/professional and personal competencies, information literacy proficiencies, administration and leadership proficiencies and technological proficiencies. Library and information science professionals according to Kollespershewer (2014) librarians are required to have competencies and soft skills in traditional/web based services, writing skills, building print and nonpoint collections, self-evaluation, information needs, attraction of users to library, communication skills, human relation skills, management skills, listening skills, marketing skills, presentation skills, and comparism of technologies.

In reflection to the above, Marshall, Atanda, and Udoeduok (2019) contend that there the librarians competencies are classified into two categories: professional competencies and proficiencies in a set of abilities, boldness and morals. The former include understanding of various types of information materials, headship and managerial skills, information technology and exploration methodology; and the later proficiencies in a set of talents, boldness and morals that stressed on incessant learning through librarians' career along with the capability to cope with the dynamic of the profession. This indicates that librarianship is a profession which changes with time hence its members should not seize to uninterruptedly learn and keep informed about their expertise. Blake (2015) as cited in Zhang, Zhang and Li

(2018) proposed three elements for professional competence: (1) Skills: denoting to the capability of specialists using his know - how to resolve problems; it could be assessed by perceiving real performance or precise presentation. (2) Attitudes: denote to emotional method-avoidance; it could assess precise individual's boldness by detecting the discussions or behaviour performance. (3) Knowledge: denoting to proofs and information required by specialists to understand certain function at work that could be proficiently conveyed via the learnt know-how. This type of competence is generally highlighted in old-style expert training as it is essential for actual performance and it can easily be appraised. Therefore this author stressed that every expert individual in any area of human endeavour should possess these three basic elements.

The professional competencies of a librarian working in higher education libraries as recognised by Tîrziman and Micle (2016) are as follows: information technology competencies, conversation in the authorised language, writing, speaking and understanding in other languages, scholarship competence, societal and community competences, business competences, ethnic competences, organisation in all activities, using legal provisions concerning work, healthiness, security and disaster situations, using environmental safety principles, handling library official papers according to information and communication technologies, managing documents specific to library activities and basic competences in mathematics, science and technology. Hence, based on the above authors, librarians working in higher education libraries such as universities should possess vast knowledge and skills in sciences, technology, ICT, humanities, business, management and others.

Maher (2017) note that competencies have long remained as a background that assist in stressing on workers behaviour about issues that mostly concern the establishment and assist drive triumph. They can make available a mutual way to select, correspond and advance capacity. The advantages are clear for managers, workforces and eventually, the establishment. For managers: They offer tools to assist them select and improve workers and also make available language to monitor performance management. For employees, competencies provide an explanation of the principles of distinction for present roles and possible yet to come roles and for organizations, they offer an act-oriented translation of what it appears like to show the principles that are strategic to accomplishment.

Professional competencies are person's internal trait that can increase the individual to perform in a way that is in agreement with the standards. They are measured and equated with criteria. It can be improved through rehearsal and improvement (McClelland, 1973). In this study it will be measured with knowledge and skills:

Knowledge connotes to an organised bulk of truths, values, performs and theories that form the foundation for a given area of human endeavour. It also refers to assimilated information in specific discipline or work areas.

Skills: refers to the use of knowledge and expertise to execute a definite bodily or mental job.

As an organisation grows, paying emphasis on only skills alone without considering the other competencies will be inadequate to grow experts and achieve career advancement for workers. There are several methods used by large establishments to grow a new proficiency model or revive an out-dated one, comprising of expert-led operational meetings, in-depth discussions with administrators, and groups meeting with workers and interested party. On the other hand, for smaller and some mid-size establishments, facing time, economical and resource limitations, a simpler, modernised method may possibly be in order. Yet there are diverse types of styles to proficiencies, one of the utmost generally utilised slant are proficiencies that are applied in concentrating on individuals performing the job. Their understanding, expertise and assertiveness desired to do a job commendably, instead of the labour itself. The most important features of a competency according to Blake (2015) as cited in Zhang, Zhang and Li (2018) are: a. Knowledge-what an expert worker should be acquainted with and comprehend the subject to guarantee efficacious success of the work. b. skills-which are indispensable for handling and applying the know-how. c. attitudes- means the way of thoughtfulness or feeling about the behaviour features of the work.

However, Abotalebi and Biglu (2017) stress that knowledge and skills should be the main focus in considering professional competencies. Core competencies for library and information specialist are: Personal and professional Core competencies .Therefore they stressed on the professional and personal competencies as indispensable for each information worker. While, professional competencies deal with a librarian's understanding in the field of library resources, information provision, ICTs, administration and research together with the capacity to apply these field of expertise as a foundation for giving library and information facilities (Hashim & Mokhtar, 2011). Moreover, Fraser-Arnott (2017) recognises four major professional competencies for librarians each with specific skills. They include:

- a. Managing information organisations: The skills needed here could be summarized as the library management skills.
- b. Managing information resources: The skills needed here are the resource building and technical skills.
- c. Managing information services: The skills needed are the reference skills.
- d. Applying information tools and technologies: Here, the information technology skills are needed.

Personal competencies on the other hand, signify a cluster of abilities, assertiveness and value that allow librarians to work competently, be excellent in communication, concentrate on CPD during their working careers, exhibit the value-added type of their assistances, and live in the innovative domain of labour (Hashim & Mokhtar, 2011). Some of these personal competencies according to Fraser-Arnott (2017) include the ability to: Look for constraints and exploit on new chances, interconnect excellently, clear presentation of thoughts, as well as be able to negotiate positively and convincingly, make corporations and all coalitions, take risks, show bravery and persistence when dealing with opposition, establish personal career preparation, think imaginatively and originally, looking for new or reinventing prospects, remain simple and optimistic in a time of on-going transformation. Specifically, the skills needed by librarians as listed by Perry in Rappale, (1997) include: outstanding hearing and problem illuminating skills, deep understanding of the value of information, overall general idea of all sorts of information, enormous understanding and practice in acquisition of information resources, ability to teach complex tasks, understanding of information organization for stress-free retrieval, capacity to build steady and constructive working rapport with co-workers and work in partnership with organisations and aptitude to supervise groups to get work completed.

In summary, professional competencies are viewed as methods applied by establishments, human resource experts, and professional unions, as well as educationalists in the planning, employment, performance and development of employees in organisations. Competencies are required by every single staff in any organisation to be successful and excel among his colleagues in a given profession or vocation. It is subject to interpretations by various scholars and experts. It serves as the foundation for skilfulness criterions that postulate the extent of skills, understanding, and aptitudes needed for accomplishment in the establishments. Professional proficiencies are joint expertise precondition needed by a staff to perform job tasks in a given area of specialisation such as law, information management,

and medicine. There are various categories of methods to proficiencies; one of the best frequently used method is the proficiencies that are applied for concentrating on the individuals undertaking the job. That is, their know-how, talents and attitudes required to carry out a task meritoriously, rather than the labour.

2.2 Empirical Review

This segment will focus on the review of empirical studies conducted globally, nationally and locally on the dependent and independent variables of the study. It will be presented as follows:

2.2.1 Work Engagement in Organisations

Numerous studies have been conducted in the globe on work engagement of various workers in different organisations, some of which will be reviewed.

Martin (2019) studied workplace engagement of librarians and library workers in United States of America. The study used survey research design. Librarians in academic, public, special and school libraries constitute the population of the survey. Questionnaire was distributed via the American Library Association listserv forum, responses were gathered virtually by the use of qualtrics, a total of one thousand one hundred (1100) responses were retrieved and analysed. Responses were tabularized using Med Calc and Statistical package for social science (SPSS) all the responses were analysed manually using constant comparative analysis, responses were coded and codes are joint into themes. The result reveals that, the whole work engagement scale by Utrecht, ways for engagement and the various elements of energy, commitment, and immersion all found to be average. Since all the basic components of Utrecht work engagement from this study are found to be on average indicating that workplace engagement of librarians in USA is at average level. The study recommended that library management should examine librarians work engagement periodically to ensure organisational accomplishment, work satisfaction, and individual gladness.

In Korea Kim, Han and Park (2019) studied the role of work engagement essential to employee performance or 'Nice to have'. The survey objective was to examine the roles of job engagement as a moderator in the associations between work and individual resources and workers results, i.e. work performance and turnover purpose, precisely concentrating on analysing the necessity of job engagement. Survey research design was used for the research. The population of the study comprised six hundred and twenty three (623) fulltime staff of

private companies in Korea. A convenient sampling procedure was applied in selecting five hundred and seventy one (571) staff as sample; questionnaire was applied for data collection. The findings reveal that, the effects of work and individual resources on work engagement, other than the effects of work engagement on work performance and turnover objective are significant. Additionally, findings of the survey revealed significant mediating effects of job engagement, similarly the association amongst work and individual resources and turnover target. The study concluded that better and enough job resources enhanced work engagement in organisations. This implies that organisations should provide adequate job-resources to their workforce for better work engagement and organisational success. The study recommended further survey using different sampling procedures.

Machiha and Brew (2019) surveyed predictors of work engagement among teachers in university of Sweden: The role of personality and perceived organisational support. The study used survey research design. Teachers in university of Sweden constitute the population of the survey. One hundred and fifty seven (157) university teachers were drawn via convenient sampling both in person and virtually. Multiple regression analysis was used in examining the data collected. Findings of the survey discovered extraversion, meticulousness and perceived organisational support are significant interpreters of work engagement. The study recommended that the study should be translated into Sweden language for better understanding and further survey should be conducted using probability sampling technique.

A study in Saudi Arabia by Alfif, Mahrani and Alabdullah (2019) investigated the factors and levels influencing work engagement amongst nurses in Najran Hospitals, Saudi Arabia. The study was carried out in two (2) public hospitals. The nurses in the two public hospitals in Najran Hospitals, Saudi Arabia make up the population of the survey. A convenience sampling was used to select two hundred and eighty nine (289) staff, head nurses as sample size for the study. UWES and a self-developed questionnaire were used to determine factors influencing nurse engagement. Finding indicated that forty nine (49) % of the nurses were engaged on average level. Vigor is significantly and positively correlated with the nurses measured work engagement, nurses' perceptions of factors associated to health care organisation interconnected positively with their work engagement. Furthermore, working shift, working experience, nationality, the working unit all influenced work engagement respectively. The study concluded that, managerial factors, leadership issues and personal

traits were positively and significantly associated with work engagement. The study recommended further study on burnout and turnover intention of nurses to ensure high-quality health care system.

In Republic of Iran, Eghlidi and Karimi (2016) studied the relationship between components of work engagement and organisational obligation of women workers of university. The study was conducted to find out the association among the parts of work engagement and organisational commitment of women workers working with the University of Isfahan, Iran Republic. Population of the study comprised of women workers of the University of Isfahan totalling four hundred and twenty eight (428) staff out of which two hundred and two (202) staff were chosen as sample of the study using stratified simple random sampling procedure. Data was collected through questionnaire while in the analysis of the data stepwise regression, Pearson product moment correlation coefficient and multifarious-way analysis of variance were used to test the hypotheses. Outcomes reveal that the relationship among work engagement and its elements vigour (the craving for work), commitment, absorption and organisational promise is significant. Between constituents of work engagement, dedication to labour is the top forecaster of organisational commitment. The study concludes Human resource managers should provide professional standards, provide workers with freedom of action, good environment and participatory leadership. The study recommends that for proper work engagement and organisational commitment in establishments there should be a strong worker – manager rapport and work engagement culture.

Pham-Thai, McMurray, Muenjohn and Muchiri (2018) in their study of job engagement in advanced education in Vietnam. The objective of the study was to find out the associations among work engagement, transformational headship, high-performance, human resource (HR) practices, environment for invention, and contextual performance. A questionnaire was used in two dissimilar times to gather data from three hundred and ninety four (394) pairs of academic staff in university together with their heads. The data collected was analysed via structural equation modelling and multi-level SEM by means of the SPSS Version 24 and Mplus Type 7.4. The results showed that transformational headship and high-performance HR practices are key factors of workers work engagement. Environments for innovation help well to umpire the effect of transformational headship on workers work engagement. In addition, workers' work engagement was significantly and positively associated to contextual performance. The study recommended that Vietnamese tertiary institutions should reorganise

their personnel management system and enhance training programmes that will facilitates creativity and innovations which consequently increases work engagement.

In Pakistan, Khan and Yusoff (2016) studied the dynamic links between resources, job engagement and job performance in academia of Pakistan using survey research design. The results of the structural equation modelling reveals that resources are significantly correlated to job engagement and labour performance, where job engagement acted as a moderator variable in the intermediate of resources and work performance variables. Based on the findings, the study concluded that resources are basic rudiments for enhanced performance. Therefore, the study recommended that attention should be given to the proper acquisition, distribution and use of resources, so that the job performance of teaching staff in Pakistan could be improved to the desired degree. Also, Khan, Aziz, Afsar and Latif (2018) investigated the effect of job embeddedness on turnover intentions, work engagement, and job performance. The study scrutinized the intermediating effect of confidence in supervisor on the influence of work embeddedness on turnover purposes, job engagement, and job performance of hotel workers. A cross-sectional survey design was carried out, four hundred and twenty seven (427) hotel workers who worked for over six months in 9 3-star hotels in Pakistan. Data for the study was collected via questionnaire. Findings reveal that, confidence in supervisor intermediated the effect of job performance, work engagement and job embeddedness on turnover intentions. Hence, organisations should try to acquire, distribute and use resources for personnel effective job performance. The study suggested for further study to cover all categories of hotels in Pakistan.

Kartal (2018) carried out a study on evaluating the relationship between work engagement, work alienation and work performance of healthcare specialists using survey research design on one hundred and forty two (142) staff of kids hospital and ICH Lahore, Pakistan, questionnaires was utilised for collecting data. It was analysed via SPSS version 21. The finding reveals that majority of the respondents display positive association to work engagement and negative relationship with work alienation. The study concluded that, it is very significant to sustain work engagement and reduce alienation at work. To improve health specialists' work engagement level, and decrease their level of alienation, the study recommended that hospitals management must concentrate on improving job performance in the hospitals.

AlZgool, Ahmed, Pahi and Ammar (2020) conducted a study on COVID-19 and work engagement: Understanding the nexus of leaders' emotional intelligence, self-efficacy and resilience in the banking sector of Bahrain. Structural equation modelling was used to study the associations among the staff of 5 main banks in Bahrain. The findings reveal the significance of leaders' emotional intelligence in improving employees' job engagement. The outcome stressed that critical time like the corona virus Epidemic can be quickly managed via leaders' emotional intelligence to improve employees energy, entanglement and craving at work. The study concluded that leaders' emotional intelligence plays an influential role in harnessing work engagement in organisations. The authors recommended for further studies that may consider longitudinal approach.

In Bangladesh, Arefin, Alam, Islam and Rahaman (2019) investigated high-performance work systems and job engagement: The intermediating role of psychological empowerment, the study intended to explore the intermediating role of psychological empowerment in the association amid high performance labour systems and work engagement. Data was collected via questionnaire from two hundred and eighty seven (287) workers of a big manufacturing organisation and it was analysed using structural equation modelling and ranked regression analysis. The outcomes indicate that perceived high performance labour systems and psychological empowerment positively influenced job engagement. Finding of the study further discovered that psychological empowerment intermediated the influence of high-performance labour systems on job engagement. The study concluded that the intermediating factor of psychological empowerment has a positive relationship with higher performance work system and job engagement in the Bangladeshi. The study recommended for longitudinal studies to discover the causal relationship among the study variables.

Ahuja and Gupta (2014) studied organisational commitment and work engagement as a facilitator for sustaining higher education professionalism in India. The objective of the survey was to find out the association among work engagement and organization commitment of advanced institutions faculty staff. A survey was conducted using the quota sampling method in selecting a appropriate number of staff from every of the four faculty work zones. Applied medicinal sciences (AMS), commerce and business management (CBM), education and humanities (EHUM), science, engineering and technology (SET) from public and private higher education institutions. Schaufeli et al. (2006) work engagement scale and Saks scale for organizational commitment were applied. The statistical analysis

method multivariate regression was used and data was analysed using SPSS version 22.0. The outcomes shown that work engagement is positively correlated to organisational commitment. The study concluded that faculty members who are highly committed to their organisations are expected to be more engaged to their job than less committed colleagues.

Gowda and Siddegowda (2018) carried out a survey on the challenges of employee engagement in the manufacturing industries in Mysore and Bangalore cities of Karnataka. The survey used questionnaire for data collection and a sample size of sixty (60) workers was conveniently selected for the study. The findings reveals that main challenges of employee engagement in the manufacturing industries in Mysore and Bangalore cities comprises of the chance progress needs of the workers active engagement, recommendations abilities set, economic needs, education, sex contestant's attractions, economic, age and market conditions. The study concluded that disengaged employees are seldom controlled by the top managers. The study recommended for capacity building of the Human Resource employees and top administrators to be motivated and educated properly by the establishment. One of the strategies to find out about work engagement is to conduct a comparative study between two or more organisations.

Zahreni, Hadiyani and Ananda (2020) conducted a study titled comparative study of work engagement among private and government-owned companies: An empirical study across plantation companies in Indonesia. The purpose of the survey was to find out the variations in work engagement among the two various sections of plantation firms. The study used survey research design and five scale likert questionnaire for data collection and Utrech work engagement scale was used to measure the degree of work engagement. The population consisted of seven hundred and fifty nine (759) workers. Data collected was analysed using multilevel model analysis. The outcomes of the study reveal that staffs' work engagement in both sectors are relatively the same and there is no significant different among them. Also, the company contributed only four percent (4%) of employees Work engagement. The greatest difference is in the workers themselves, which is ninety six percent (96%). The study concluded that, there is no variation in work engagement in public and private plantation employees. The most difference occurs among the workers. This means that the worker controls whether or not they are engage. Therefore further investigation is necessary to verify this result.

Gulzar and Teli (2018) conducted a study titled gender and work engagement: A study of academic staff in higher education. The objective of the survey was to study the influence of gender differences on work engagement level of the academics in advanced education institutions. A survey involving one hundred and twenty three (123) academics from three (3) universities studied using the independent samples test. The findings disclose that, the work engagement level of female academics is significantly improved than that of the male academic staff. The study concluded that female academics have higher job engagement than their corresponding male faculty members. Consequently, the hypothesis: Gender effects the level of work engagement can be accepted. The study recommends the consideration of gender variations of workers by human resource experts in organisations.

In Egypt Elhanafy (2018) studied the associations between organisational trust, cyber loafing, work the relationship between Cyber loafing, organizational Justice, work engagement and organisational trust among nurses. The goal of the study was to discover engagement and organisational justice among nurses. The correlational survey design was used in conducting the study, at Damanhour National Medical Institute. The population of the study encompasses critical care, surgical and medical sections. Four tools were applied for data collection namely: work engagement scale, justice scale, trust scale and Self-reporting Cyber loafing scale. The finding reveals that fifty seven point one percent (57.1%) of the respondents had a low level of total cyber loafing (28.6%) of the respondents had a moderate level. While (14.3%) of the respondents had a high level. (49%) of the nurses studied had a moderate level of total organizational justice. In the meantime, (38%) of the nurses studied had a low level of organizational justice. Whereas (13%) of them had a high level. (48%) of them had a moderate level of total organizational trust. While, (34%) of them had a low level, while (18%) of the organizational justice had a high level. (61.4%) of the organizational justice had a moderate level of total work engagement and, (24.3%) of them had a high level, (14.3%) of the respondents had a low level. Also findings further reveals there was a positive relationship between organizational trust, justice and work engagement. But there was a negative correlation between cyber loafing with trust, justice and engagement. The study concluded that there was a highly significant positive relationship between total organizational justice of the studied nurses, their total organizational trust and total work engagement. Incessant appraisal of organizational trust and justice to prevent nurses' turnover intention and conduction of further research was recommended by the researchers. Falola,

Oludayo, Igbinoba, Salau and Borishade (2018) carried out a survey titled Measuring work engagement strategies and employees' behavioural outcomes in Nigerian universities. The population of the study comprises of faculty members of six (6) selected private universities in Nigeria. The sample for the study encompassed of 600 respondents across the top 6 private universities in South-west, Nigeria. Stratified and simple random sampling techniques was applied in selecting the sample. Structured 5- scale questionnaire was the instrument used for collecting data. SPSS and AMOS 22 were used in analyzing the data collected while SEM was applied to ascertain the degree of association and resultant effect. The findings reveal that recognition of efforts, career opportunities, fun at work, investment in staff and institution's reputation have positive effect on job satisfaction, job involvement and workers loyalty. It is suggested that advance studies can increase the scope of the study. Thus, a comparative investigation between private and public universities through the six geo political regions should be conducted.

Oladejo and Kareem (2019) surveyed Job concern factors and academic staff engagement in public universities in Lagos state, Nigeria. Respondents were 250 randomly selected academic staff from two purposively selected public universities in Lagos State. A self-constructed questionnaire was used for data collection Five null-hypotheses, tested at .05 level of significance, guided the study. Data collected were analyzed via inferential statistics, specifically one Sample t-test, Pearson Product- Moment Correlation, Pearson Chi Square, and Independent t-test respectively. Findings revealed that, the level of academic staff engagement in Lagos State public universities, Nigeria, was low. The study concluded that engaged academic staff will be able to give excellent teaching, community service, and research to the community, which will translate into quality output in terms of competent graduates. It was recommended that Government and institutional administrators should ensure that the working environment is made more conducive for scholarly works, employ more qualified staff, and avoid interpersonal discrimination among academic staff.

Influence of work engagement on job burnout among librarians in university libraries in Southern Nigeria was a study conducted by Akinola (2020). The goals of the research were to find out the level of work engagement amongst librarians working in university libraries in Southern part of Nigeria. The study used survey and the population for the study comprised of six hundred and twenty four (624) librarians from 38 public universities in Southern Nigeria, total enumeration was used. Mean and standard deviation were used to analysed the

research questions and SPSS, 22.0 version was used in analysing the hypothesis. The findings of the study reveals that, the level of work engagement among librarians studied was at very high level and also the findings further reveals that they are passionate, excited, punctual, committed and exhibited reduced turnover intension. The study has provided a standpoint that will help universities workers and other tertiary institutions to identify their level of work engagement and take preventive measures against job burnout. The study recommended that librarians in university libraries in Nigeria should be allowed to sustain high work engagement among their staff. More so, training on how to enhance work engagement should be organised by the library administration.

Arimie (2019) studied employer-employee relations and employee engagement in a tertiary institution in Benin - City, Edo State, Nigeria. The study was conducted to find out the association between employer-staff and workers engagement in the study area. The study used qualitative research design. The population of the study consisted of management staff and a cross section of them were interviewed. The findings of the study disclose that, employee engagement is a consequence of employer-staff relationships and the strength of the association is one of the most critical issues that motivation engagement and satisfaction of staff. The study concluded that improved employee engagement is a by-product of employer employee relationships and the quality of the association is one of the most serious factors that drive engagement and satisfaction of workers. The study recommended that further study using qualitative approach should be carried out to comprehend the association between employer employee relations and work engagement in Public higher institutions.

2.2.2 Continuous Professional Development

Continuous professional development is crucial in the survival of every establishment by preparing employees to meet the dynamic trends of knowledge economy. Many scholars conducted numerous studies on continuous professional development; some of these studies are reviewed in this section:

In USA, Valcourt (2020) conducted a study for ACRL/STS sector continuing education professional development committee, to ascertain the continuing education interests and needs of its members. The study employed survey research design and questionnaire was applied in collecting data. A total of one hundred and fifteen (115) responses were retrieved.

Majority of the respondents, ninety seven percent (97%) were academic librarians. The findings reveals that, most librarians studied, seventy eight percent (78%) indicated a preference towards receiving continuing education through webinars and teleconferences, closely followed by a preference towards receiving continuing education at conferences or preconference workshops (74%). Other suggested preferences included science boot camps, departmental seminars and self-paced learning modules. Only 19% of respondents indicated interest in taking credit courses. A study by Suliman, Kruger and Pienaar (2020) on continuing professional development (CPD): a necessary component in the workplace or not? The objective of the study was to find out whether CPD should be a compulsory element in the specialised work arena or not. using documentary analysis. The result shows that a many obstacles are associated to the partaking of experts in CPD activities. The major hindrances most specialists confronted which stop them from partaking in CPD are either the arrogances of specialists towards CPD or time restrictions due to work. The study concluded that there is a low response to the survey and rate from science librarians who have been in the field less than five years. Thus, it was recommended that the STS PD Committee should be more visible through webinars, virtual preconference and web-paced learning modules, make partnerships with other establishments, and provide free CPD

Moonasar and Underwood (2018) conducted a survey titled continuing professional development opportunities in ICT for academic librarians at the Durban University of Technology (DUT), South Africa. The study population are academic librarians in DUT Library, the goal was to discover their assertiveness on CPD and its delivery. It used a mixed method research design. Questionnaire and interview was applied in collecting data from twenty-five (25) academic librarians. A follow-up interview was carried out with five (5) respondents. The findings indicated that, even though the librarians studied were mindful of the usefulness of CPD and the power of ICT on library assets and services, not all of them are up-to-date about CPD accomplishments within their expertise. This study stressed the significance of managers inspiring and encouraging their staff to participate in CPD programmes. Participation in CPD provides more interaction and relationships with colleagues nationally and globally, improves skills and knowledge of the participants. The study recommends LIS educators should be allowed to work hand in hand with the professional librarians to ascertain practical examples to share with students, and the

curriculum should integrate and support the dynamic trends and the influence of ICT on libraries.

In Uganda, Namaganda, (2019) surveyed the continuing professional development (CPD) of librarians in public University libraries in Uganda. The goal of the survey was to ascertain the varieties of CPD programmes, delivery of CPD, motives for pursuing CPD and constrains. A survey research design was adopted, Fifty (50) librarians of public University libraries constitute the population of the survey a sample of thirty nine (39) librarians were randomly selected and a virtual questionnaire was used. The findings indicated that librarians partake in various CPD activities to progress skilfully. Seminars, symposiums and workshops are the typical categories of CPD. most of the respondents undergo CPD in order to advance their understanding and abilities. Nevertheless, insufficient funding, management participation, lack of awareness, time limitation and lack of funding from library deter librarians from partaking in CPD programmes. The study concluded that libraries support the parent organisation towards the attainment of its aims and objectives and CPD of librarians is part and parcel of their career progression. The survey reveals that CPD in public universities in Uganda was not regular and poorly coordinated. Hence the study recommends that the Library professional associations should try to enlighten the librarians about the value of CPD and try to updates the content of CPD in line with the dynamic nature of the profession.

Yaqub, Owusu-Cole and Ofosua, (2020) studied the challenges facing continuing professional development (CPD) of academic staff of the colleges of education in Ghana. The purpose of the survey was to uncover the serious constrains confronting CPD of academics of colleges of education in Ghana. The study used mixed method design. Questionnaire and the interview were used for data collection. Census and the purposive sampling method were used in gathering data from three hundred (364) respondents including teachers, human resource management and development team and presidents, assistant principals and quality reassurance staff. Data gathered were scrutinized via mean and standard deviation. The interview data was analysed via text analysis. The findings discovered that respondents do not exploit the possible benefits of CPD programmes because of some encounters like absent of organised and all-inclusive training wants analysis and feeble communication amid the institute looking for the training and the establishment delivering the exercise. The study concluded that colleges of education studied did not exploit the advantages of CPD activities as a result of lack of partnership between the colleges of education and the organisations

providing the programme. The study recommended that CPD activities be in line with the learning needs analysis and integration of contemporary knowledge and skills. It was further recommended that management of colleges of education must try to have an evaluation system related to the staff training needs.

Owusu-Acheaw (2017) conducted a research on professional development programmes for polytechnic library staff in Ghana: Challenges and prospects. Survey research design was used. Questionnaire was the instrument used to collect data, the population of the survey included the library personnel in polytechnic libraries in Ghana both professionals and Para-professionals totalling eighty (80). Since, the population is not much the researcher used the whole population as sample. The outcomes of the study indicated that, majority of the respondents are aware of CPD. They established that the understanding they acquired via CPD had meaningfully improved their work performance. The study also exposed that respondents had under gone many CPDs such as workshops, colloquiums and symposiums. The survey also found that the obstacles for CPD are lack of sponsorship and inadequate budget. Based on these findings the study concludes that CPD is vital for performance. The survey recommended that CPD should be a continuous process and should not be restricted to only conferences and workshops. Library Staff polytechnics should accept CPD for skills and competencies improvement and Management of higher institutions should dedicate more resources for CPD needs of Library personnel

Saade, Ghazala, Farhat and Hallit (2018) carried out a research titled attitudes towards continuous professional development: a study of pharmacists in Lebanon using survey research design. The population of the study comprises of eight hundred (800) pharmacists and five hundred and twenty five (525) pharmacists were randomly selected to serve as sample for the study. Finding of the study reveals that 50% of the respondents acknowledged that all the items stated in the questionnaire encouraged completing CPD, lack of time was the most crucial barriers against partaking in CPD. The survey concluded that attitude and motivation to CPD were positive in this study. Convenience of group learning activities due to remoteness and location, job boundaries and lack of time were the major barriers to participation in CPD. The survey recommended for further studies in large scale to cover all pharmacists in the country.

Harker, Toole and Sassen (2018) investigated academic library professional development programme in Texas University Library in United States of America using survey research design. The population of the study comprises of academic librarians in Texas University. The study described how measures of want, involvement, satisfaction, and influence were used to evaluate many aspects of a professional development programme in a large academic library. A sample of fifty seven (57) librarians was purposively selected to serve as the sample of the study. Findings of the study reveal that assessment can contribute to the success of a professional development programme in various ways. Continuous assessment provides accountability to measures of need, participation, satisfaction, stakeholders and impact; it will continuously improve the programme and deliver relevant information about its benefits to the current and potential participants. The study concluded that assessment CPD assist to the accomplishment of the success of the program in many means such as incessant assessment offers accountability to stakeholders. method of need, participation, gratification, and impact. Additional research is required to determine the most real methods to apply in assessing CPD.

In Nigeria context, a survey was conducted by Iwuchukwu and Echedom (2020) on staff training and development programmes in academic libraries in Imo State, Nigeria. All academic librarians in five institutions of higher learning in the state, numbering eighty one (81) make up the population of the study. Questionnaire was applied to collect data for the survey. Frequency count and arithmetic mean were applied in analysing the data gathered. Finding reveals that, currently available training and development programmes in academic libraries in Imo state available to a high extent; librarians request/staff need, library needs and institutional objectives, are the standards applied in selecting librarians who will participate in personnel training and development activities. Constraints to personnel a training and development activity in the academic libraries studied are: lack of management policy on training and development activities and poor funding. The study concluded that academic libraries studied have improvement in the availability of staff training and development activities which pave way to remain relevant in the contemporary information society. The following recommendations are made based on the findings of this study: Government and/or management of tertiary institutions in Imo state should provide adequate resources for staff training and development activities in academic libraries. National Library Association and Librarians' Registration Council of Nigeria should constantly inspire librarians to participate

in seminars, workshops, conferences and other training programmes. On other hand, Onuoha (2013) examined librarians' use of social media for professional development in Nigeria. The population was made up of one thousand two hundred and ninety four (1294) registered members of Nigerian Library Association (NLA) virtual medium. Simple accidental sampling procedure was used to select two hundred and ninety seven (297) samples for the study. Data was gathered through the use of questionnaire. The finding reveals that virtual conversation mediums such as NLA virtual forum, virtual social webs such as Wikis and Facebook are regularly utilise for CPD activities. Respondents also stated that they share and grasp a lot by participating in the platform. The survey concluded that academic librarian's attitude towards the use of social media for continuing professional development is positive. Consequently it is essential that university library administrators should formulate policies that will reassure academic librarians have positive attitude to the use of social media. Organisational support and favourable atmosphere to stimulate academic librarians to use social media more consistently and properly for CPD should be provided by library managers. Posigha and Seimode (2015) surveyed professional development of library professionals in Nigeria. The study used questionnaire to collect data from the 246 librarians in the various libraries. The data collected were analyzed using simple count and percentage. Finding reveals that librarians in Nigeria libraries are actively engaged in professional development activities.

2.2.3 Professional Competencies of Employee

Professional competencies of employees including librarians are essential requirements for recruitments, productivity, performance and competitive advantage. Several studies have been conducted across the globe on professional competencies of various employees' librarians inclusive, some of which were reviewed.

In Emporia, United States of America, Sutton and Collinge (2018) conducted a study on competencies for e-resource librarians, qualifications sought by e-resource librarians employers in job advertisements published from 2009 to 2010 using NASIG (the North American Serials Interest Group, Inc) standard using qualitative research design (documentary analysis approach). The population consists of e- resources librarians in North America. Nvivo software was applied in analysing the data assembled. Finding reveals that, the core competencies necessary of an e-resource librarians comprised some or all of the

following: supervisory and management abilities, technology, research and assessment, effective communication, up-to-date with developments in germane fields of information, understanding of e-resources life-span, and a specific set of personal qualities. Due to the dynamic and quick developments in ICT as well as the manage e-resources changes, they similarly stated that after every 5 years, the essential competencies for e-resources librarians must to be revised. The study will offer instructors to identify the competencies needed by the establishments, so that master's degree programs can in turn offer managers with proficient professionals. The study suggested incorporation of cataloguing and metadata, online repositories, and courses from management, financial management and business practices.

Jordan (2015) carried out a survey on the competencies for public library managers: multiplicity in practice. The goal of the survey was to recognise the common competencies among public library managers in Boston, USA. Online questionnaire was the instrument used gather data, a total of fifty seven (57) participants responded and agreed to participate in the survey: 52 females and five males. A list of competencies were given to them and requested to select those they think are the most essential for present public library administrators, for those future leaders. The following skills were rated highest by the respondents: political understanding, and advocacy, communication skills, client service and encounter resolution. Communication was preferred as the most important proficiency from the list given to them, when they were asked to identify the proficiencies more vital for their work. Ninety seven (97) Percent of them, chosen communication skills as the top important proficiencies. The study work toward a better understanding of the skill sets which are necessary to administrators of public libraries. The study recommended for future research to elucidate and refine the skills requirements of all public library managers that will allow them to achieve greater triumph in their job.

In Canada, DeLong (2020) conducted a study on the competencies for librarians in Canadian Research Libraries using mixed-methods including focus groups, literature reviews and a survey. Forty four (44) respondents partook in focus groups and 52 responses were gathered from the survey. Responses in focus groups and from the survey were collected and coded via qualitative data analysis software. Finding discloses that, the proficiencies for librarians in Canadian Research Libraries are: collaboration vigorous learning and adaptation, curation and safeguarding, impartiality, multiplicity and presence, engagement and involvement,

evaluation and Valuation, management and facilitation, dream, innovation and consultation and communication.

In Israeli, Bronstein and Nebenzahl (2020) conducted a survey on the developing scales for identifying and classifying library and information science skills and competencies: An Israeli perspective the objective of the survey was to identify the development of proficiencies and expertise measure for Library and Information studies specialists. Members of the two libraries and information studies (listservs) constitute the population of the survey. A sample of 183 respondents was drawn and questionnaire was used for data assemblage. Findings confirmed viability of a typology encompassed of forty six (46) abilities and proficiencies as issues in many-items measures. Factor exploration and Cronbach's Alpha are applied in analysing the data gathered, which bring about four groups: ICT abilities, information expertise, individual proficiencies and old-style librarianship skills and indicated that 25 out of 46 unique abilities help to the elucidation of 44% of the total variance. The findings established that, irrespective of the quick changes that threatened the vocation in the last years, the abilities and proficiencies that have been at the fundamental of the work are still germane together with ICT skills connected to virtual settings such as website improvement and administration. The study concluded that speedy technological, social, and economic modifications that happened in the last decades have affected the nature of library and information job. Wong (2019) carried out a survey on academic librarians' leadership competencies in Hong Kong. He applied the leadership competencies model established for the Library Leadership and Management Association. The study utilised an anonymous online questionnaire installed on the software platform for all the 17 experiences in the model. The findings draw consideration to a subdivision of proficiencies and uncover perceptual changes amid librarians at various leadership positions and recommended that: Time management/managerial skills, self-consciousness, and self-instruction be incorporated in the LLAMA Model to make it more effective. The study concluded that vision, integrity, management skills, collaboration skills, and communications are the five most important attributes for academic library leaders studied. The study recommended conducting a mixed method study of library leaders on their perceptions and experiences of core leadership competencies required in the digital age

In Pakistan, Ahmad, JianMing and Rafi (2019) carried out an analysis of academic librarians' competencies and skills for implementation of Big Data analytics in libraries. The study

applied survey research design and library administrators in Pakistan university libraries make up the population of the study which were 173 in number. Questionnaires were sent to the respondents various e-mails. They were demanded to freely fill in the questionnaires. One hundred and eighteen (118) representing (68.2%) of the respondents completed the questionnaires. Pearson product moment correlation was used via SPSS version 25 in analysing the strong point of the conjoint relationship between the variables. Finding reveals a strong association among the essential proficiencies and expertise of librarians for the putting into practice of Big Data analytics in academic libraries. The study concluded that librarians possess a better comprehension of the term of Big Data analytics. The study recommended studies concerning the constraints of managing Big Data by potential researchers.

Digital competencies for developing and managing digital libraries was a survey conducted by Khan and Bhatti (2017) in Pakistan University libraries using survey research design, the population of the survey include university librarians in higher education, twenty (20) universities were purposively selected and a sample of one hundred and thirty two (132) university librarians were selected using simple random sampling procedure and questionnaire and SPSS were utilised for data analysis. The findings revealed digital proficiencies for mounting as well as handling digital libraries was divided into three major classes: digital proficiencies to protect digital substances, digital proficiencies for mounting digital libraries; digital proficiencies for supervising digital libraries. The study concluded that digital competencies for developing and managing digital libraries are classified into three main categories: digital competencies for developing digital libraries, managing digital libraries and digital competencies to protect digital contents. The study recommended that Librarians should attend training opportunities and workshops to obtain digital skills.

Another study titled workplace information literacy skills: Library professionals' competency at university libraries in Karachi, Pakistan was carried out by Ali and Richardson (2018) using an online survey via Google forms data was gathered from seventy seven (77) academic librarians working in twenty five (25) universities in Karachi, Pakistan. The survey contain six general characteristics: Searching techniques, library organizations, information literacy, information entities, research upkeep and general/individual attributes. Findings show that, the respondents possess decent information literacy skills in information searching and retrieval. Nonetheless, the average of all survey responses was 54.17 per cent, with 12 of

the 24 proficiencies receiving scores of less than 50 per cent. Thus, indicating a normally general low level of Information Literacy proficiency in the workstation. The study concluded that there is general low level of information literacy competency in the workplace studied. The study recommended for further study on the potential impact of gender on features such as level of Information literacy skills and motivation to improve workplace proficiencies.

Ahmed and Rehman (2016) studied the perceptions and level of ICT competencies: a survey of librarians at public sector universities in Khyber Pakhtunkhwa, Pakistan. The population for the survey encompassed of one hundred and five library specialists in the 14 Government university libraries in Khyber Pakhtunkhwa, Pakistan. Findings of the survey discovered that the position of ICT proficiencies of library specialists in the area is insufficient. The study concluded that library professionals in Khyber Pakhtunkhwa possess rudimentary knowledge in computer operating systems, digital library and institutional repository software. The study recommended that library and information schools in Khyber Pakhtunkhwa should meticulously review their syllabuses to encompass courses addressing contemporary requirements of the profession. Additionally, these courses should concentrate on practical training in order to improve the required ICT competencies. The period of practicum should also be extended.

Academic library leaders' challenges, difficulties and skills: An analysis of common experience was another research carried out by Ashiq, Rehman, and Batool (2018). The objective of the research is to discover the opinions of heads of academic library in Pakistan on library management. Qualitative research approach was used via phenomenology design. Data were gathered through exhaustive interviews with fifteen academic library heads. The outcome of the study reveal that, the required leadership skills by academic library leaders were team building, communication, dream, societal interaction, managerial understanding and information sharing. The study concluded that communication skill is one of the main challenges and most needed management skills for the current library managers. Library administrators believed that soft skills are needed more than any other skills. It was suggested that library professional bodies, associations and institutions need to train and provide skilful library management for the future, and to make efforts towards creating awareness about the pivotal role of libraries in the society.

Farooq, Ullah, Iqbal, & Hussain,(2016) studied current and required competencies of university librarians in Pakistan. The goal of the study was to discover the opinion of university librarians on the contemporary and needed proficiencies and to recognise the present rank and to suggest the standard for proficiencies of library specialists in public universities in Pakistan. Survey was employed in the study. The population consist of ninety two (92) librarians working in public universities of Islamabad and Rawalpindi with a minimum of master's degree in Library and information science. Total enumeration was used. Questionnaire was utilised in data collection. Inferential statistic was used in analysing the data collected: independent sample t-test, paired sample t-test and ANOVA were used. Findings revealed that there is substantial gap amid the opinions of respondents on their existing abilities and necessary abilities. The current rank of the abilities is poorer than the preferred extent of proficiency. There is no significant association among the years of experience, rank and expertise of academic librarians. On the other hand, male have an upper marks on the present status of proficiencies whereas womanly have a greater marks on the needed grade of abilities. The study concluded that it is imperative for university librarians to redesign themselves by recognising the essential competencies to meet the information needs of library professionals. The study suggested that library professional bodies, associations and institutions need to train librarians and students on internet searching skills, modern expertise and managerial skills.

In Bangladesh, Hossain, and Sormunen (2019) studied ICT skills of library and information Science (LIS) students in Bangladesh. The goal of the study was to evaluate self-estimated general and task-precise (ICT) expertise of Library and Information studies learners in Bangladesh via survey research design and questionnaire as a tool for data gathering. The outcomes reveal that learners' self-projected; overall computer and virtual abilities are respectable. The survey also reveals that, the respondents identify that they are not bad in general computing and internet browsing, although average in higher computing and internet browsing and appraisal of web resources.

Recognizing the personal competencies of future information professionals was a study conducted in Malaysia by Yatim, Nasharudin, Samsudin, Said and Tarsik (2018) using survey research design and population of university undergraduates of the Department of Information Management, University of Technology Mara, Malaysia. The questionnaire was developed based on the nine domains of Personal Competencies for data collection. The

result indicated that the Personal Competencies of Future Information Professionals are: relationships skills, interaction skills, writing skills, presentation skills, media literacy skills, leadership skills and critical thinking. The study would bring benefit to all prospective information specialists as it can assess future graduate preparedness to enter the profession. The personal competencies of information professionals could be used as a standard for information specialist. Masrek, Johare, Saad, Rahim and Masli (2012) conducted a survey on the essential competency of Para-professionals in library services of Sarawak State Libraries. The study investigated the needed competencies of library officers. The goal was to ascertain the essential proficiencies of library officers in service provision. Survey research design was utilised, data was gathered via questionnaires, from five hundred and two (502) library-officers working with the library. The outcome reveals that all the seven sets of proficiencies, viz: collection Management, overall competencies; agency and managerial information, reference and research, content organization and structure and library ICT administration are either moderately or highly needed by the library officers. The study concluded that the competencies needed by the paraprofessionals are nearly equal to the competencies of the professional librarians which include: general competency; organizational knowledge; library leadership and advocacy; reference and research; collection management; content organization and structure and library technology management. The study recommended for further study on the topic.

Afkhami, Tajafari and Nakah (2019) survey the status of librarians' communication skills and the effective factor in public libraries in Mashhad, Iran, the population consisted librarians in public libraries numbered seventy (70) , a sample of fifty nine (59) librarians was selected. Questionnaire was the tool applied for gathering data. The data gathered was analysed via the SPSS. The results indicated the level of the librarians' communication skills was poor and there was no substantial variation amid the mean marks of the librarians' communication skills in terms of demographic and professional physiognomies. It is concluded that librarians lack good communication skills and better contact with users. In-service training in this part was not adequately provided to the librarians. Thus, the administrators and management of public libraries should train and retrain librarians in public library on communication skills particularly spoken skills to the librarians. Kasalu and Ojiambo (2015) conducted a study on competencies, skills and attitudes required in a changing health environment using survey design technique in Eldoret, Kenya to find a variety of proficiencies, abilities and attitudes

essential to health librarians in the dynamic health environment. The population of the study encompasses of librarians in hospitals and universities running health sciences programme in Eldoret. Five organisations were selected using purposive sampling technique for data collection. Questionnaire was applied as tool for data assemblage. The outcome reveals that a diversity of expertise and proficiencies namely: information system and technology, knowledge of health environment, health studies information materials and facilities, health information management, management skills, as well as research analysis and interpretation are essential for health librarians to carry out their duties successfully and proficiently in the present health setting in Africa. The finding also reveals that Library and Information studies institutes in Kenya have not sufficiently addressed proficiencies and abilities vital for health librarians. The study concluded that professional skills, knowledge and aptitude are very significant for health librarians to assist and make effective influence to evidence-based health care system. The study suggested that health librarians in third world countries are advised to utilise continuing professional development chances in order to acquire crucial skills to be able to assist health care system proficiently and successfully in these nations.

Grgic and Zivkovic (2017) carried out a survey on the essential competencies for academic reference librarians in Croatia. The population of the survey included reference librarians in Croatian academic libraries. A sample of eighty three (83) reference librarians selected using purposive sampling procedure. Online questionnaire was applied in data gathering. The data collected was examined with graphic statistics. Findings reveals that academic reference librarians surveyed approves that basic competencies are mostly user-focused on and technologically focused in 'bibliographical' viewpoint and the most significant skills for reference librarians are search and ICT expertise, web upkeep and oral communication. The study concluded that the core competencies are mainly patron-oriented and ICT motivated. The most important skills and competencies are search and ICT skills, web maintenance and verbal communication. The study recommended for a comparative study with other countries to compare the results with other global teams.

In Nigerian context, librarians' proficiencies and students satisfaction with information services in University of Uyo, Akwa Ibom State, Nigeria was a study carried out by Atanda, and Udoeduok (2019) Ex-post facto research design was applied for the survey. The

population of the survey encompassed of one thousand eight hundred and fifty five listed patrons in the library throughout 2016/2017 period. Ten Percent 10% (185) of the population was selected incidentally as the sample of the survey. The data composed were analysed using descriptive statistics and t-test. The outcome reveals there is a noteworthy effect of librarians' understanding of information entities on students' gratification with information services. There is an important effect of librarians' practical expertise on students' gratification with information services. In line with the findings of the study, it was concluded that librarians' proficiencies with specific importance on librarians; knowledge of information resources, technical skills and inter-personal abilities have a substantial influence on students' contentment with information services at the University of Uyo Library. The authors recommended that librarians should be vast in the area of information resources that are found not only in academic libraries but other libraries and information centres for service delivery.

Oyedokun, Oyewumi, Lawal, and Medinat (2018) survey the ICT competence of library staff in selected universities in Kwara State. The population is made up of one hundred and ninety one (191) library personnel, a sample of one hundred and twenty two (122) were drawn. Questionnaire was used for data collection. Findings reveal that, the library personnel studied possess a high level of ICT proficiency particularly expertise that are considered rudimentary and intermediate ICT skill. The study concluded that library personnel in the selected university libraries studied are very skilful in both basic and intermediate ICT skills. The study recommended that library administration should make accessible enough information infrastructures and provide CPD programmes for library personnel. There should be a mentorship programme were by the senior or more knowledgeable workers should mentor the new workers. Library schools should review their curriculum in line with the global best practice in librarianship.

Salam, Akawu. and Sadiku (2018) conducted a survey titled competencies of librarians: A pivotal for real service delivery in University Libraries in Niger State. The population of the survey comprises forty (40) librarians working in two (2) university libraries in Niger State. The entire population was used (Total enumeration). Questionnaire was utilised as a tool for data gathering and data gathered was analysed through descriptive statistics. Finding reveals that the level of librarian's competencies was higher in providing traditional library services than electronic library services. The study concluded that librarians must understand that

unceasingly improve upon their competencies for better service delivery. The study therefore, recommended that library management should allow and sponsor staff to attend CPD programmes so as to improve upon their proficiencies, librarians should try to apply their competencies in innovative and electronic information services. Similarly, Oladokun and Gbadegesin (2017) conducted a survey titled adequacy of core knowledge and soft skills in the performance of professional employees of real estate firms in Nigeria. The population comprises of 450 estate firms with head offices in Lagos. 405 questionnaires were circulated among the respondents and a total of two hundred and sixty four (264) questionnaires were retrieved and analysed via descriptive statistics, one-sample *t*-test and correlation analysis. Outcomes reveal workers of estate companies studied show sufficient understanding in ten (10) out of twenty one (21) fundamental parts of real estate activities. It also revealed that worker studied have good listening and communication abilities yet are lacking courtesy and writing skill. The study serves as a research base for evaluation of soft skills of real estate workers in Nigeria real estate companies. The study recommended for further study into the opinions of other stakeholders in the industry.

Another study on of the assessment of cataloguing and classification competencies of librarians in Nigerian academic libraries was carried out by Bamise, Oluwaniyi and Igbeneghu(2019). Cross-sectional studies of eighty four classifiers from twenty academic libraries through the zones of the country were accidentally chosen for the survey. Their cataloguing and classification capabilities; obtainable cataloguing utensils and difficulties run into were assessed. Questionnaires were used to collect data. The mean value for proficiencies in cataloguing and classifications is 3.3. Finding it suitable to make judgments in handling gray areas had the least score of 2.6. The mean value for the cataloguing apparatuses normally used is 3.4. DDC had the least score of 2.2. The study concluded that cataloguers can classify cataloguing entries under most precise Subject heading that exactly represent content using library of congress list of subject headings. They can also simply recognize access points; main entry and added entry. The study recommended that the management of academic libraries in Nigeria should provide sufficient up-to-date cataloguing tools. Cataloguers should be allowed to attend various seminars, conferences and seminars so as to update their skills and competencies.

Atte and Ibikunle (2017) studied the constraints to acquisition of competencies for effective information services provision by librarians in North Western Nigerian University libraries.

The population of the study comprises of one hundred and seventy three librarians from three North Western Universities. Questionnaire was applied for data gathering. Data collected were analyzed via percentages and tables. Findings revealed that economic constrains, non- sponsorship and insufficient infrastructure are the main constraints that prevent them from acquisition of proficiencies. The study concluded that some constrains retard librarians from acquiring skills and competencies, hence librarians studied should try to overcome these obstacles so as to acquire new competencies and maintain the existing ones for better service provision. The study recommended among others that the management of the library studied should try to allocate adequate funds for CPD. A survey of the digital literacy skills and knowledge-based competencies among librarians in university libraries in Nigeria was carried out by Okeji, Tralagba and Obi (2019). Librarians working in Nigerian Universities constitute the population of the study; there are one hundred and seventy (170) approved universities in Nigeria according to Nigeria universities commission (2019). Data was gathered through questionnaire distributed virtually. A total of three hundred and fifty six (356) academic librarians from eighty three (83) university libraries were communicated via email. One hundred and one (111) academic librarians responded. The outcome revealed that digital literacy skills of the librarians studied was found to be very high and high respectively. In line with the findings of the study it was concluded that a most of the librarians rated their database searching skills, uploading documents to online platforms, sending and receiving e-mails and skills in using different social media as very high. The study recommended for the review of the library and information science curriculum to reflect the current information age.

2.2.4 Professional Competencies and Work Engagement

A study conducted by Haruna and Marthandan (2017) titled foundational competencies for improving work engagement in SMEs in Malaysia. It examined the impact of basic proficiencies on work engagement in Malaysian SMEs. SMEs staff in Malaysia constitutes the population of the survey. A sample of three hundred and twelve (312) workers of SMEs was randomly selected. Partial least squares procedures was applied to test the hypotheses. Outcomes reveal that basic proficiencies have a significant positive impact on work engagement. The findings further displayed that basic proficiencies positively associated with work engagement of the respondents. The study concluded that foundational competencies significantly affect the work engagement of workers in these companies. The study suggested

that Administrators/policymakers should organize training and coaching activities to improve these competencies, which will consequently advance the work engagement and career development of their workers. In Indonesia, Nasrul and Masdupi (2020) surveyed the effect of competencies and job stress on work engagement with job satisfaction as mediating variable using survey research design. staff of the Bukittinggi city Government constitute the population of the study and a sample two hundred (200) respondents was selected. Data was composed through the use of questionnaires. Data gathered was analysed using SEM AMOS. Finding reveals that proficiencies have a important positive effect on job gratification and job engagement. The study concluded that competency has a positive and significant effect on work engagement. This implies that the more enhanced the competency of workers the more work engagement is improved.

In a survey conducted by Koech and Cheboi (2018) titled 'analysis of workers engagement on employee performance in technical schools in Kenya'. The survey wanted to find out the effect of personnel engagement on workers performance. Staffs working in the technical institutions in Kenya made up the population. The cluster sampling procedure was used to determine the appropriate sample for the survey. Regression model was used to test the influence of workers engagement on worker performance, the results of the survey shown that there is a significant positive correlation amongst workers engagement and personnel recital. The study concluded that work engagement has a positive effect on job performance in the institution studied. The study recommended that college should develop procedures on how overcome workers disengage at work.

2.2.5 Continuous Professional Development and Work Engagement

Continuous professional development not only enhances current proficiencies, but also addresses facilitates work engagement (Marquez, 2016). Peerthy (2018) surveyed continuing professional development and quality of teaching: A case study in state secondary schools in Mauritius in East Africa using mixed method approach encompassed of a survey made of all the principals then, a semi-structured interviews with 9 teachers, 3 HODs, 3 principals and two directors. Some additional data were also composed from a World Bank adviser when he visited Mauritius. The outcome reveals that, the central model of continuing professional development learning (CPDL) which is workshops do not supply teachers with the essential expertise to advance their standard of instruction. The study concluded that CPDL could help teachers to become better

teachers through obtaining new expertise and enhance upon their competencies. The study suggested that ministry of education should organize a variety of CPDL programmes for teachers.

In Qatar, Johnson, Masaba Munir, O'Dwyer, Smith, Elawad, and Abdulla, (2020) assessed attitude, knowledge and practice of nurses after a continuing professional development programme: A qualitative study. The goal of the research was to ascertain the attitude knowledge and practices of nurses in Qatar before and after the distribution of the immunisation-related continuous professional development programme. The study used interpretive descriptive study design, ten (10) out of one hundred and twenty five nurses who had completed the training exercise approved to participate in the interview, the findings of the research reveals that participants felt that CPD permits them to be personally-motivated to catch up with new and emergent information. It was also discovered that CPD, immunisation-training programme was fruitful in enhancing the attitude, understanding and practices of the members. The study concluded that continuing professional development of nurses outside traditional baccalaureate nursing programs is crucial to in order to make sure that nurses acquire the knowledge to carefully handle, teach and manage vaccines in line with the stated standard.

Owaka (2014) survey the perceived effect of continuing professional development on individual performance of professional nurses in ministry of health owned facilities in Nairobi city county, Kenya. The survey population consist of 1450 nurses. A sample of two hundred and seventeen (217) was selected for the survey. Data collected was analysed with SPSS. The findings of the study disclosed that the nurses studied strongly agreed that CPD has seriously assisted them improve their performance constrains and advance their expertise and proficiencies. Based on the findings of the study it was concluded that, generally the nurses studied agreed strongly that CPD has a positive influence on their job performance. The study suggested that ministry of health in Nairobi, Kenya should develop a structure to make sure an impartial nurses' selection for participation in CPD programme.

Li, Hurkmans, Sayre and Vlieland (2010) investigated how continuing professional development is connected with improving physical therapists' roles in arthritis care in Canada and Netherlands, through survey design technique. The goal of the research was to find out the associations between the roles anticipated by physical therapists in arthritis management

and their former partaking in arthritis courses designed for CPD. The study used questionnaire as device for data gathering. A total of six hundred (600) Canadian physical therapists and four hundred and sixty one Dutch physical therapists working in orthopaedics were randomly chosen to partake in the study. The findings reveals that arthritis-associated CPD courses significantly improved the possible number of roles expected by physical therapists by a factor of 1.32 in osteoarthritis care and 1.69 in rheumatoid arthritis care. The study concluded that there is relationship between arthritis CPD courses and the roles expected by physical therapists in arthritis care in Canada and the Netherlands. The study recommended that further study should focus on assessing the influence of CPD on other aspect of physical therapist practice and on patients' results.

Nassazi (2013) conducted a study titled effects of training on employee performance: Evidence from Uganda. The study applied case study research design. Staff of the telecommunication industry in Uganda serves as the population of the study. The data was gathered via questionnaires comprising of 18 questions distributed to 120 respondents. The outcome of the research reveals that training has a clear effect on the performance of workers in the telecommunication industry in Uganda. Based on the findings of the study it was concluded that training and development have an effect on the performance of workers with regards to their jobs. The study suggested that it is indispensable for any business organisation to study matters associated to training and development.

In a study conducted by Safari (2017) in Indonesia, titled teacher professional competency analysis: Implementation aspect of CPD. The goals of the study was to discover the practice of teacher reflection as the core in the carrying out the workable competence programme. The study adopted the qualitative research approach with phenomenology design. Data was collected by in-depth interview and documentation and it was analysed by using referential adequacy, extension of observation, and Miles and Huberman interactive models. The findings reveals that workable professionalism programme exercise has an effect on teacher clusters that deliberate on research matters, more diverse, contextual and managerial needs of teachers. The study concluded that the putting into practice aspect of CPD activity through reflection action to productive marketing teacher in SMKN 2 Kediri. The study suggested for further study in teacher competency and professionalism examination but various scope and background. In Pakistan, Aziz and Akhtar (2014) carried out a survey on the impact of training on teachers competencies at advanced education level in Pakistan. Teachers trained

by higher education commission through faculty professional development scheme and some members without training serve as the population of the survey. Multi – stage sampling procedure was applied, 289 trained members were chosen via census- sampling method and those without training were also selected, a total of five hundred and ninety six (596) faculty members serve as the sample of the study. The competencies of teachers without training and those with training were equated. Teacher’s competencies measurement scale was used to compare the two competencies. Mean standard deviation and t -test were applied to discover the variations. Trained instructors displayed a significant variance in research proficiencies, administration and valuation proficiencies and pedagogical proficiencies. It is clear from the finding; all the two groups trained teachers were more proficient than those without training, hence the concluded that trained teachers are more competent than teachers having no training. The present study recommended that training activities of similar kind should be sustained to ensure teachers competencies improvement.

Tahir, Yousafzai and Hashim (2014) studied the Impact of training and development on employees’ performance and productivity: A case study of united bank limited Peshawar City, Pakistan. The study used survey and questionnaire as instrument for data collection. 8 branches of the bank were purposely chosen for the survey. Data gathered from the survey was analysed through the application of descriptive statistic tools and SPSS. Findings reveal there was substantial association among the variables studied. The study concluded that training and development is imperative for organization to have expert and proficient workers for improved performance, and workers will be more skilled when they possess the understanding and expertise of carrying out the job. It will also provide openings to the workers to make enhanced job-career life and get superior position in establishments. The study recommended that banks’ administrations concerned with staff productivity and effectiveness should adopt training and development activities. In India, Singh and Shukla (2018) studied the role of training and development on work proficiency: Employee perspective. A survey was carried out on the staff working with information Technology companies in Delhi and NCR. The sample size was one hundred (100) workers purposively selected within the age bracket of 20-40 years and working in technology or tech-related area. The findings reveal that training and development benefit staffs with job expertise and bring up to date new technology and skills. It can be concluded from the findings of the study that workers ascribed values to the training conducted by the organization; it is significant factor

for improving skills and career progression in the organization. The study recommended for further study to be conducted to covers the gender issues vis-à-vis training.

2.2.6 Summary of Empirical Review

Table 2.1

S/N	Author, Title	Year, Study Area	Methodology	Findings	Research Gap
1.	Afkhami, N., Tajafari., M. & Nakah, S. M. A. (2019) The status of librarians' communication skills and the effective factor in public libraries.	Mashhad , Iran	Survey research design	The results indicated that the level of the librarians' communication skills was poor and there was no substantial variation among the mean scores of the librarians' communication skills in terms of demographic and professional physiognomies.	The study was conducted in Iran, it covers only communication skills. The study was silent about the other skills as well as the two variables of this study.
2.	Agrawal, S. (2016) Factors influencing employee engagement: A study of diverse workforce	New Delhi, India	Survey research design	The findings reveal that, socio and economic benefits, work environment, team work and opportunities for learning new skills and ideas are the factors that influence workers engagement in diverse workforce.	The survey was conducted in India, the population of the study covers employees in both Governmental and private organisations. The study was silent about CPD and professional competencies.
3.	Ahmad, K., JianMing, Z., & Rafi, M. (2019) An analysis of academic librarians' competencies and skills for implementation of Big Data analytics in libraries.	Pakistan	Survey research design	The study discovered a great association among the needed proficiencies and expertise of librarians in the operation of Big-Data in academic libraries.	This study was conducted in Pakistan and the population covers all academic librarians while this study covers only librarians

4	Ahmed, S. & Rehman, A. U. (2016). Perceptions and level of ICT competencies: a survey of librarians at public universities in Khyber Pakhtunkhwa, Pakistan	Khyber Pakhtunkhwa, Pakistan.	Survey research design	The finding reveals the level of ICT proficiencies amid library experts in the area is insufficient.	The research was conducted in Karachi, Pakistan and concentrate only on ICT competencies. The study did not cover professional competencies and CPD.
5.	Ahuja, S., & Gupta, S. (2014) Organizational commitment and work engagement as a facilitator for sustaining higher education professionals.	India	Survey research design	The findings indicated that, work engagement is positively correlate of organisational commitment.	The study was conducted in India and the study was silence on the CPD and professional competencies of librarians.
6.	Akinola, A. A. (2020) Influence of work engagement on job burnout among librarians in University libraries in Nigeria.	Sourthan -Nigeria	Survey research design	The survey reveals the status of work engagement among librarians in Nigerian university libraries is very high.	The study covers only work engagement. There is need to carry out another study that will cover CPD and professional development. Which the study will fill the gap.
7.	Alfif, H., Mahrani, S. and Alabdullah H. (2019) Levels and factors influencing work engagement among nurses in Najran	Najran, Saudi Arabia	Survey research design	The finding reveals that forty nine Percent of the respondents are engaged on average. Vigour joined significantly, and completely, with the nurses recorded work engagement, nurses' perceptions of issues associated with health establishments absolutely and meaningfully interrelated with their	The survey population was nurses and it was carried out in Saudi Arabia. Similar study on librarians need to be carried out in Nigeria.

				work engagement. Furthermore, working experience, operational shift, the working section, nationality altogether had its effect on work engagement also.	
8.	Ali, M. Y., & Richardson, J. (2018). Workplace information literacy skills. Information and learning science.	Karachi, Pakistan.	Survey research design.	The findings indicated that the librarians studied possess good information literacy expertise in information search and retrieval of information materials.	The research was conducted in Karachi, Pakistan and concentrate only on information literacy skills. It was also silence on work engagement and CPD.
9.	Alzgoool, M. R. H., Ahmed, U., Pahi, M. H., & Ammar, A. (2020). COVID-19 and work engagement: Understanding the nexus of leaders emotional intelligence, self-efficacy and resilience in the banking sector of Bahrain	Bahrain	Survey research design	The findings indicated that, there is significance of administrators' emotive intelligence in enhancing workers' work engagement. The outcome have also affirmed that life-threatening times such as the Corona virus pandemic can be quickly control via administrators' emotional intelligence to augment workers engagement, desire and energy at job.	The study was conducted in Bahrain banking sector similar study using librarians in federal university libraries needs to be conducted.
10.	Arefin, M. S., Alam, M. S., Islam, M. R., & Rahaman, M. (2019). High-performance work systems and job engagement: The mediating role of psychological empowerment	Bangladesh	Survey research design	The findings indicated how, perceived high performance labour schemes and psychological enablement absolutely influenced work engagement. It was also discovered; psychological	The survey did not cover CPD and professional competencies. It was carried out in Bangladesh.

				empowerment intermediated the effect of great-performance job systems on work engagement.	
11.	Arimie, C. J. (2019) Employer-employee relations and employee engagement in a tertiary institution in Benin – City, Edo State	Edo State, Nigeria.	Qualitative research design.	Findings of the research revealed that, workers work engagement is a by-product of establishment-worker relationships and the standard of the association is among the most serious feature that motivate engagement and gratification of workers	The study looked At only a single variable of the present study.
12.	Ashiq, M., Rehman, S. U. & Batool, S. H. (2018). Academic library leaders' challenges, difficulties and skills: An analysis of common experience	Pakistan	Qualitative research methodology was applied through phenomenology design.	The findings of the study revealed, the required leadership skills by academic library leaders were team building, vision, knowledge sharing, social interaction, organisational understanding and communication.	The study was conducted in Pakistan Similar study needs to be conducted in Nigeria and it covers only Leadership competencies and it used phenomenology design unlike this study, that will apply survey research design.
13.	Atanda, L. A., & Udoeduok, E. (2019) Librarians competencies and students satisfaction with information services in University of Uyo library	Uyo, Akwa Ibom State, Nigeria	Survey research design	The outcome reveals that there is a noteworthy impact of librarians' understanding of information entities on students' gratification with information services. There is a significant impact of librarians' practical expertise on students' gratification with	The population of the study were students not librarians. It covers only one state in different Geo-political zone whereas this study covers seven states in different geo-political- Zone.

				information services.	
14.	Aziz, F., & Akhtar, M. M. S. (2014). Impact of training on teachers competencies at higher education level in Pakistan.	Pakistan	Survey research design	The outcomes of the study reveals It is clear from the finding; all the two groups trained teachers were more proficient than those without of training .	The research was conducted in Pakistan among Teachers in tertiary education institutions, similar study need to be conducted in Nigeria among librarians working in University libraries.
15.	Bronstein, J., & Nebenzahl, O. (2020). Developing scales for identifying and classifying library and information science skills and competencies: An Israeli perspective.	Ramat-Gan, Israeli	Survey research design	The study indicated four clusters: personal competencies, technology skills, traditional librarianship skills and information skills as the skills competencies scale for Library and Information Studies specialists. The study also recognised that, the fundamental skills and competencies are still pertinent together with technological skills.	The study was conducted in Israeli and covers all information Professionals while this study concentrates on librarians in University libraries in North West, Nigeria with two additional variables.
16.	Chewe, P. & Zulu, Z. (2020). A Survey of digital literacy skills among library professionals in Zambia.	Zambia	Survey research design.	The digital literacy expertise amongst librarians in Zambia is low.	Study covers all library professionals in Zambia and only covers digital literacy skills. Similar study need to be replicated to cover other competencies and variables.
17..	DeLong, K. et – el (2020)	Canada	Mixed-methods	Finding discloses the proficiencies for	The study covers research libraries

	competencies for librarians in Canadian research libraries.		including literature reviews, focus groups and a survey	librarians in Canadian Research Libraries as follows: collaboration vigorous learning and adaptation, curation and safeguarding, impartiality, multiplicity and presence, engagement and involvement, evaluation and Valuation, management and facilitation, dream, innovation and consultation and communication.	in Canada and it used mixed method research design.
18.	Eghlidi, F. F., & Karimi, F. (2016). The association among components of work engagement and organizational commitment of female workers of University.	Isfahan, Republic of Iran	Survey research design	Findings indicated that the relationship measurement among work engagement and its constituent's energy (the craving for work), commitment, absorption and organisational promise is noteworthy. Between the components of work engagement, devotion to labour is the top forecaster of organisational promise.	This survey only covers females workers in university and it did not cover CPD and professional competencies of librarians.
19.	Elhanafy, E. Y. (2018). Relationship between cyber loafing, organizational justice, work engagement and organisational trust among Nurses.	Damanhour National Medical Institute, Egypt.	Survey Research Design	Findings reveals there was a positive association between organizational trust, righteousness and work engagement. But there was a negative correlation between cyber loafing with trust, justice and engagement.	The study was conducted in Egypt and the study was silence on professional competencies and CPD.
20	Fadekemi, B. O., Tunji, O. J. &	Nigeria.	Survey research	finding reveals that the level of	The study did not cover all the

	Burono, I. I. (2019). Evaluation of cataloguing and classification competencies of Librarians in Nigerian Academic Libraries.		design	cataloguing and classification proficiencies of librarians in Nigerian academic libraries is higher.	competencies of librarians, it only concentrates on classification cataloguing and competencies, unlike this present study that looks at librarians professional competencies in federal Universities in North west, Nigeria.
21.	Falola, H. O., Oludayo, A. O., Igbino E. E., Salau, O. P. & Borishade, T. T. (2018) Measuring work engagement strategies and employees' behavioural outcomes in Nigerian Universities.	Nigeria	Survey Research Design	Findings reveal that recognition of efforts, career opportunities, fun at work, investment in staff and institution's reputation have positive effect on job satisfaction, job involvement and workers loyalty.	The survey used employees' behavioural outcomes as independent variable and it did not cover CPD and professional competencies.
22.	Farooq, M. U., Ullah, A., Iqbal, M., & Hussain, A. (2016). Current and required competencies of university librarians in Pakistan.	Pakistan	Survey research design	The current rank of the expertise is poorer than the favourite status of proficiency. There is no noteworthy association between the length of job, rank and expertise of academic librarians. On the other hand, male possess an upper marks on the present status of proficiencies while womanly have a greater score on the requisite grade of expertise.	The study was conducted in Pakistan, the population was university librarians and it was silent on CPD and professional competencies.
23.	Gulzar, S., & Teli, M. R. (2018).	Kashmir, India	Survey research	results reveals that, the level of job	The study was conducted in

	Gender and work engagement: A study of academic staff in higher education		design	engagement of womanly academics is higher than their male counterpart.	Indian higher institutions and this study concentrates on federal Universities in North-west Nigeria.
24.	Harker, K. R., O'Toole, E., & Sassen, C. (2018). Assessing an academic library professional development programme.	Baltimo, U. S. A.	Survey research design.	Outcome of the survey shows; assessment can assist to the achievement of a professional development programme in many ways. It delivers accountability to stakeholders. Measures of need, satisfaction, and impact, it will continuously improve the programme, and provide information about its benefits to current and potential participants and participation.	The study was silence on the CPD and professional competencies. Hence, the significant of this study.
25.	Haruna, A. Y., & Marthandan, G. (2017). Foundational competencies for enhancing work engagement in SMEs Malaysia	Malaaysia	Survey research design	The outcomes of the study reveal that basic proficiencies have a important positive impact on work engagement. The findings further indicated that basic proficiencies positively associated with work engagement of the respondents.	The study population was staff of SMEs in Malaysia whereas the population of this study are librarians in federal university libraries in North-West, Nigeria.
26.	Hossain, M. A. & Sormunen, E. (2019). Studied ICT skills of Library and Information Science (LIS) students in	Banglade sh	Survey research design.	The outcomes reveal that learners' self-projected; general computer and internet abilities are respectable.	Study was conducted in Bangaladash and the population was students which makes it different from the present study.

	Bangladesh.				
27.	Iwuchukwu, C. O., & Echedom, A. U. (2020). Staff training and development programmes in academic libraries in Imo State, Nigeria.	Imo State, Nigeria	Phenomenology research design	Results indicated; there are existing training and continuing professional development schemes in tertiary institutions libraries in Imo state to a high extent; librarians request/staff need, library needs, institutions objectives are the criteria used to select librarians to attend staff training and development programmes.	The study was done in Imo State and covers all academic libraries and it applied phenomenology research design. But this current Study is combining Work engagement and professional competencies focussed on federal University libraries in North – west Nigeria.
28.	Johnson, J., Masaba, A., Munir, S., O'Dwyer, R., Smith, A., Elawad, K., & Abdulla, S. A. A. (2020). Assessing knowledge, attitude and practice of nurses after a continuing professional development program: A qualitative study.	Qatar	Interpretive description study design	findings of the research reveals that participants felt that CPD permits them to be personally-motivated to catch up with new and emergent information. It was also discovered that CPD, immunisation-training programme was fruitful in enhancing the attitude, understanding and practices of the members.	The study population was nurses, it was conducted in Qatar.
29.	Jordan, M. W. (2015) Competencies for public library managers: diversity in practice	Boston, USA	Survey research design	The following skills were rated highest by the respondents: political understanding, and advocacy, communication skills, client service and encounter resolution. Ninety seven (97) Percent of them, preferred	Study covers only Public library Managers and it was conducted in USA. The research was conducted in public libraries unlike this present study which covers University libraries in North-

				communication skills as the top important proficiencies.	western Nigeria.
30.	Kartal, N. (2018). Evaluating the relationship between work engagement, work alienation and work performance of healthcare professionals.	Lahore, Pakistan	Survey research design	finding reveals that majority of the respondents display positive association to work engagement and negative relationship with work alienation.	The study was conducted in children hospital among health care professionals in Pakistan, similar study needs to be conducted in University libraries in Nigeria.
31.	Khan, A., & Yusoff, R. B. M. (2016). A study on dynamic links between resources, work engagement and job performance in academia of Pakistan.	Universities in Pakistan	Survey research design	Result reveals that resources are significantly correlated to job engagement and labour performance, where job engagement acted as a mediator variable in the intermediate of resources and work performance variables.	The research was conducted in universities in Pakistan, similar study need to be conducted in Nigeria.
32.	Khan, M., Aziz, S., Afsar, B., & Latif, A. (2018). The effect of job embeddedness on turnover intentions, work engagement, and job performance.	Pakistan	Survey research design	Findings reveal that, confidence in supervisor intermediated the effect of job recital, work engagement and work embeddedness on turnover intentions.	The study population was hotel employee in Pakistan. This study focuses on Librarians' i. e. they constituted the population.
33.	Khan, S. A. & Bhatti, R. (2017). Digital competencies for developing and managing digital libraries.	Pakistan	Survey research design	findings revealed digital proficiencies for mounting and handling digital libraries categorised: digital proficiencies to protect digital substances, digital proficiencies for mounting digital libraries; digital	The paper covers only proficiencies for emerging and handling Digital libraries it did not cover other competencies required by librarians. Also it was carried out in Pakistan not in

				proficiencies for supervision digital libraries.	Nigeria.
34.	Kim, W., Han, S. J., and Park, J. (2019). Is the Role Of Work Engagement Essential to Employee Performance or ‘Nice to Have’?	Cheonan, Korea	Survey research design	findings reveal that, the effects of work and individual materials on work engagement, other than the impact of work engagement on work recital and turnover objective are noteworthy. Additionally, findings revealed substantial mediating effects of job engagement, similarly the association among work and individual resources and turnover target.	The study was conducted in Korea similar study need to be conducted in Nigeria.
35.	Koech, C. J. S., & Cheboi, J. (2018). An empirical analysis of employee engagement on employee performance in technical institutions in Kenya	Kenya	Survey research design	Finding indicated a substantial positive connexion between workers engagement and personnel performance.	The study was conducted in technical institutions of Kenya, it need to be replicated in Nigerian University libraries. also it did not cover CPD and professional competencies.
36.	Machiha, M. M. & Brew, G. (2019). predictors of work engagement among University Teachers in Sweden	Sweden.	Survey research design.	Findings of the survey discovered; extraversion, meticulousness and perceived organisational support are significant interpreters of work engagement.	It was carried out in Sweden, it needs to be replicated in Nigeria it was also silence on CPD and professional competencies.
37.	Martin, J. (2019). Workplace engagement of	United States of	Survey research design.	Result reveals that total Utrecht work engagement scale	The study population consisted of

	librarians and library staff in United States of America.	America.		means all fall within the average range.	librarians and library staff of public, academic, school and research libraries unlike this study whose population comprises of only librarians of federal University libraries in North-west, Nigeria.
38.	Moonasar, A. & Underwood, P. G. (2018). Continuing professional development (CPD) opportunities in information and communication technology for academic librarians at the Durban University of Technology	Durban, South Africa	Survey research design	Findings indicated that, even though the librarians studied were mindful of the usefulness of CPD plus the power of ICT on library assets services, some of them are up-to-date about CPD accomplishments within their expertise.	The study did not look at other CPD opportunities and it was also conducted in South Africa. Hence the scope of the study needs to be extended to cover other CPD opportunities, professional competencies and work engagement.
39.	Namaganda, A. (2019). The continuing professional development (CPD) of librarians in public University libraries in Uganda	Uganda	Survey Research Design	Findings indicated that librarians partake in various CPD activities to progress skilfully. Seminars, symposiums and workshops are the typical categories of CPD. most of the respondents undergo CPD in order to advance their understanding and abilities. Nevertheless, insufficient funding, management participation, lack of awareness, time constraint and lack of support from library	The study was conducted at public university libraries in Uganda, the study need to be replicated in Nigerian public university Libraries, as the focus of the study was only on CPD.

				hinder librarians from partaking in CPD programmes.	
40.	Nasrul, E., & Masdupi, E. (2020). The Effect of competencies and job stress on work engagement with Job satisfaction as mediating variable	Bukittinggi City, Indonesia	Survey research design	Finding reveals that proficiencies have a substantial positive power on work gratification and job engagement	Survey was conducted in Indonesia, it need to be replicated in Nigerian University libraries. And also it was silence on CPD.
41.	Nassazi, A. (2013) Effects of training on employee Performance.: Evidence from Uganda.	Uganda	Case study research design	Outcome of the research reveals that training has a strong effect on the recital of workers in the telecommunication industry in Uganda.	tudy was conducted in Telecommunication industry and it was silence on professional competencies and work engagement.
43.	Okeji, C. C., Tralagba, E. C., & Obi, I. C. (2019) digital literacy skills and knowledge-based competencies among librarians working in university libraries in Nigeria	Nigeria	Survey desearch Design.	Outcome of the survey revealed that digital literacy skills of the librarians studied was found to be very high and high respectively .	The article did not cover other competencies and it covers all universities such as private and public universities. While this study covers only Federal Universities in North-West, Nigeria.
44.	Oladokun, S. O. & Gbadegesin, J. T. (2017). Adequacy of core knowledge and soft skills in the performance of professional employees of real estate firms in Nigeria property management	Lagos, Nigeria	Survey Research design	The outcomes reveal that workers of estate companies studied show sufficient understanding in ten out of twenty one fundamental parts of real estate activities. It also revealed that worker studied have good listening and communication abilities yet are	The study population are workers in the estate and property management whereas the population of this study consist of librarians. Additionally, the study was conducted in

				lacking courtesy and lettering skill.	south-west (Lagos) and this study will be conducted in North-west, Nigeria.
45.	Onuoha., U. D. (2013). Librarians' use of social media for professional development in Nigeria.	Nigeria	Survey research design	Finding reveals that virtual conversation mediums such as NLA virtual forum, virtual social webs such as Wikis and Facebook are regularly utilise for CPD activities. Respondents also stated that they share and grasp a lot by participating in the platform.	The study concentrates on the application of social media tools for professional development and silence on CPD and professional competencies.
46	Owaka, E. D. (2014). The perceived effect of continuing professional development on individual performance of professional nurses in ministry of health owned facilities in Nairobi city county, Kenya	Nairobi, Kenya	Survey research design	Findings disclosed that the nurses studied strongly agreed that CPD has seriously assisted them improve their performance constrains and advance their expertise and proficiencies.	The study was conducted among nurses in Kenya, it needs to be conducted among librarians in universities in Nigeria.
47.	Owusu-Acheaw, M. (2017). Professional development programmes for polytechnic library staff in Ghana: Challenges and prospects.	Ghana	Survey research design	The study established that the information they acquired via professional development have significantly enhance job recital. Respondents participated in various conferences, workshops and seminars	The study population covers specialized and para-professional staff of polytechnic libraries in Ghana while this study's population consists of only federal University libraries in North western, Nigeria.

48.	Oyedokun, T. T., Oyewumi, F. A., Lawal, M., & Medinat, D. (2018). Assessment of ICT competencies of library staff in selected universities in Kwara state, Nigeria.	Kwara State, Nigeria	Survey research design	Findings reveal that, the library personnel studied possess a high level of ICT proficiencies particularly expertise that are considered rudimentary and intermediate ICT skill.	The study was only on ICT competencies unlike the present study working at CPD, professional competencies and work engagement.
49.	Peerthy, P. (2018). Continuing professional development and quality of teaching: a case study in state secondary schools in Mauritius	Mauritius	Mixed method research design.	The outcome reveals that, the central model of continuing professional development learning (CPDL) which is workshops do not supply teachers with the essential expertise to advance their standard of instruction.	The study was carried out in state secondary schools in Mauritius and used mixed method while this study concentrates on university libraries and applied survey research design.
50.	Pham-Thai, N. T., McMurray, A. J., Muenjohn, N., & Muchiri, M. (2018). Job engagement in higher education	Vietnam	Survey Research Design	The results showed that transformational leadership and high-recital HR practices are facilitators of workers job engagement. Also, workers work engagement was absolutely and meaningfully associated with circumstantial recital.	Study was conducted in Vietnam, it did not cover CPD and professional competencies.
51.	Saade, S., Ghazala, F., Farhat, A., & Hallit, S. (2018). Attitudes towards continuous professional development: a study of pharmacists in Lebanon	Lebanon	Survey research design	Finding reveals 50% of the pharmacists acknowledged that all the items stated in the questionnaire encouraged completing CPD, lack of time was the most crucial barriers against partaking in CPD.	The study was conducted in Lebanon among Pharmacists. However, the Present study to

					be conducted in Nigeria among librarians working in University libraries.
52.	Safari (2017) teacher professional competency analysis: Implementation aspect of continuous professional development (CPD)	Indonesia	Qualitative research design.	findings reveals that workable professionalism programme exercise has an effect on teacher clusters that deliberate on research matters, more diverse, contextual and managerial needs of teachers.	The study concentrates on teachers in Indonesia and also it was silence on professional competencies and professional competencies.
53.	Salam., R. O., Akawu., L & Sadiku., K. A. O. (2018) Competencies of Librarians: A Pivotal for effective service delivery in University Libraries in Niger State	Niger State, Nigeria	Survey research design	Finding reveals level of librarian's competencies was higher in traditional library services than in electronic library services.	The article did not looked at the other two variables which this study intends to addresses.
54.	Santos, Y. T. P. (2017). The Profile of a Modern Filipino Librarian: An Examination of Perceived Competencies.	Filipino, Philippines	Qualitative research design	The study reveals that apart from the traditional library and information studies skills like classification and cataloguing, abstracting and indexing and library management, but non-	The survey was conducted at Philippines using Qualitative Research Design. There is need to carry out another study in the other parts of the world. This is why is

				traditional proficiencies like teaching skills, communication skills, advocacy skills, and technology skills were discovered to be the necessary competencies.	filling this gap.
55.	Semode, F. D., Ejitagha, S., & Baro, E. E. (2017). Social networking sites: changing Roles, skills and Use by librarians in tertiary institutions in Nigeria.	Nigeria	Survey research design.	Librarians in Nigerian tertiary institutions assessed their expertise; interrelating with associates and relations, examining and circumnavigating dissimilar SNSs, utilising information morally, and capacity to appraise information on SNSs to be advanced.	The survey concentrates on social networking skills it did not cover other competencies, also it did not cover universities alone and the other two variables which this study intends to address.
56.	Singh, A., & Shukla, T. (2018). Role of training and development on work proficiency: Employee perspective	Delhi. India	Survey research design	The study findings reveal that training and development helps employees with job proficiency and updating new technology and skills.	staff working in IT industries in Delhi, India made up the the population, unlike this study whose population is made up of librarians.
57.	Suliman, Z., Kruger, W., & Pienaar, J. A. Continuing professional development (CPD): A necessary component in the workplace or not?	South Africa	Documentary analysis	The major hindrances stopping majority of the experts from partaking in CPD are either the arrogances of professionals towards CPD or time restrictions due to work.	The study was conducted in South Africa using content analysis research design. The population of study comprises of civil servants whereas this study population comprises of librarians.
58.	Sutton, S. W., and Collinge, R.	Emporia, United	Content analysis	Finding reveals that, the core competencies	The study was conducted in

	(2018). Competencies for E-resource Librarians Redux: What Do They Look Like in 2017?	States of America (USA)		necessary of an e- resource librarians comprised some or all of the following: supervisory and management abilities, technology, research and assessment, effective communication, up- to-date with developments in germane fields of information, understanding of e- resources life-span, and a specific set of personal qualities.	USA using content analysis research design. Similar study need to be conducted in Nigeria using survey research design.
59.	Tahir, N., Yousafzai, I. K., Jan, S., & Hashim, M. (2014). The impact of training and development on employees performance and productivity: A case study of united bank limited Eshawar City, KPK, Pakistan	Pakistan	Survey research design	Results showed; there is significant association among the variables studied.	The paper concentrates on bank employees in Pakistan and also silence on work engagement and professional competencies. .
60.	Valcourt, A. (2020). ACRL/STS Section Continuing Education Survey of Professional Development Committee	United States of America.	Survey research design	The findings reveals that most of the librarians surveyed (78%) indicated that they prepared receiving continuing education via webinars and teleconferences, closely followed by a preference towards attending continuing education at conferences or preconference workshops (74%).	Study was silence on work engagement and professional competencies. and it was conducted in the united States of America.
61.	Wong, G. K.W. (2019). A tool for	Hong Kong	Survey research	findings draw consideration to a	The study did not looked at other

	academic libraries to prioritize leadership competencies.		design.	subdivision of proficiencies and uncover perceptual changes amid librarians at various leadership positions and recommended that: Time management/managerial skills, self-consciousness, and self-instruction be incorporated in the LLAMA Model to make it more effective.	competencies and it was conducted in Hong Kong. Hence, there is need to conduct another study that will cover the other competencies of academic librarians in Nigeria.
62.	Yaqub, E. N., Owusu-Cole, C., and Ofosua, C. F. (2020). Challenges facing continuing professional development (CPD) of academic staff of the colleges of education in Ghana	Ghana	Mixed method	findings discovered that respondents do not exploit the possible benefits of CPD programmes because of some encounters like absent of organised and all-inclusive training wants analysis and feeble communication amid the institute looking for the training and the establishment delivering the exercise.	The study was conducted in colleges of education in Ghana. It need to be replicated in university libraries in Nigeria. Also the study excluded the work engagement and professional competencies.
63.	Yatim., N., M., Nasharudin, N., Samsudin, N. F., Said, S. M., & Tarsik, N.F (2018). Recognizing the personal competencies of future information professionals.	Department of Information Management, University of Technology Mara, Malaysia	survey research design	result indicated that the Personal Competencies of Future Information Professionals are: relationships skills, interaction skills, writing skills, presentation skills, media literacy skills, leadership skills and critical thinking.	Survey was carried out in Malaysia and students in the department of information management served as the population of the study.
64.	Zahreni, S., Hadiyani, S. Ananda, F. (2020)	Indonesia	Survey research design.	Finding reveals that personnel's work engagement in	The study was carried out in companies in

	Comparative study of work engagement among private and Government-owned corporation company: An empirical study across plantation companies in Indonesia.			both the two divisions are rather the same and there is no significant different among the two.	Indonesia, it was a comparative studies unlike this study which is correlational in nature. Also it was silence on CPD and professional competencies.
65.	Oladejo and Kareem (2019) Job concern factors and academic staff engagement in public universities in Lagos state, Nigeria.	Lagos, Nigeria.	Survey research design.	Findings revealed that, the level of academic staff engagement in Lagos State public universities, Nigeria, was low.	The study covers academic staff in public universities in Lagos, this study covers only professional librarians in Federal universities in North-West, Nigeria

2.3 Theoretical Framework

This segment presents suitable theories and models for the research. Theoretical framework suggests which variables affect an occurrence of attentiveness and explains the necessity to survey in what way those variables might vary and in what circumstances. Therefore, the researcher developed theoretical framework that will guide him on the appropriate theories to be adopted for the study. Theory refers to a rationally interconnected kind of plans that make meaning out of various interconnected incidents and predict actions or attitude that are expected to happen when certain circumstances are met. Theories are framed to describe, forecast, and appreciate phenomena, in several conditions, to test and spread out prevailing understanding contained by the boundaries of critical leaping expectations. Hence, the goal of a theory is to help the investigator to elucidate the connotation, landscape, and challenges associated with a phenomenon and apply that awareness and understanding to perform in a better knowledgeable, efficient and real manner. There are numerous theories and models that could be used to reinforce research on continuous professional development, professional competencies and work engagement. These theories and models include among others: Resource-based view theory by Penrose's (1959), AMO theory by Baily (1993), Boyaltizis

competency model (1882, 2008), Iceberg competency model by Spencer and Spencer (1993), Human capital theory by Schultz and Becker (1961, 1964), Self- directed learning theory by Knowles (1975), Lewin organisational development theory by Lewin (1898 – 1947) and theory of work Engagement by Khan (1990).

The researcher adopted three theories/models for this study, these are: Job demand and resources (JD-R) model of work engagement developed by Bakker and Demerouti (2006) to address work engagement, human capital theory developed by Schultz and Becker (1961, 1964) to address continuous professional development and iceberg competency model developed by Spencer and Spencer (1993) to address librarians' professional competencies.

2.3.1 Job Demands and Resources (JD-R) Model for (Work Engagement)

The model was advanced in 2006 by prominent researchers, Bakker and Demerouti (2006) as a substitute to the already existing models for employee well-being. They published their long – term research findings in *Journal of Managerial Psychology*. JD-R model denotes to an exciting connection amid job resources and job demands in the direction of elucidating personnel engagement at labour in an organisation. It is centred on the description that each vocation or profession incorporates some factors that are classified into: job resources and job demands. The model proposes that job resources like superintendent assistance and workmate support can improve persons` job engagement. Likewise social support resources assist in enhancing psychological work engagement. Furthermore, job resources are similarly critical in contrasting the bad influence of job demands therefore it ensure many aspects of the role of job resources in connection with work engagement. This means that every profession and labour role (s) have some certain fundamentals that either help workers to make more psychosomatic creativity at labour or to exhaust their intellectual, bodily and psychosomatic energies. The model essentially uphold that when there is higher job demands and less job resources issues like tension and burnout are greater than before. On the other hand, when both job demands and job resources are high it leads to job engagement and high recital. Human resource supervisors apply it forecast job engagement and workers burnout. The model is well known among human resource managers, researchers and academics, it is also to a certain extent appropriate for practical application in organisations.

Components of the Theory

This model possesses two basic components these are:

Job demands: bodily, psychosomatic, social, or organisational features of the job that need continual corporeal and/or psychological exertion or expertise. Consequently, they are connected with definite physiological and/or psychosomatic expenses. They comprises of the following aspects: physical demand, emotional demands, cognitive demand and quantitative demand.

Job resources: physical, psychosomatic, social, or organisational features of the work that are either or: useful in achieving labour objectives; decrease job demands and the accompanying physiological and psychological cost; inspire individual progress, education, and development. Examples are physical resources, emotional resources and cognitive resources.

Contribution of the Theory

This model stressed that all professions could possess its particular menace issues connected with work pressure, these features can be divided in two divisions: job demands and job resources. When both are higher, higher stress and motivation is to be anticipated. And on other hand, when they are equally low, stress free and motivation is to be projected. JD-R model support that work resources like supervisor support and workmate support can boost persons` work engagement. The model recommends that social support resources assist in increasing psychological work wellbeing (engagement). It also emphasizes that job resources are also fundamental for reversing the bad effects of job demands hence; there is a complex role of job resources in connection with work engagement.

Critiques of the Theory

The JD-R model in connection with work engagement does not consider the precise conditions of some vocations and backgrounds into consideration (Bakker, Demerouti, & Sanz-Vergel, 2014 Lavigna (2013, 2015). Lavigna (2013, 2015) contended that, the multifaceted bureaucratic managerial structures in public system of government, the regular changes of political governance, and definite motivations to work as a public servant may effect work engagement. A number of public administration researchers, therefore suggested

for additional comprehensive academic attention and interest to analyse the significance and practical application of work engagement in the public sector context.

Relevance of the Theory to the study

JD-R model can be applied as an integrative conceptual framework for examining the place of work with the purpose of growing job engagement and avoid burnout in establishments. Akinola (2020) emphasises that it encompasses of negative and positive indicators and consequences of worker health, job demands as the undesirable and demotivation measurement of job consequences which may result to job burnout while job resources concentrate on the positive and the motivational features of work conditions and their influence on workers job engagement, health and job recital. The JD-R model denotes to a stimulating connection of job resources and job demands in elucidating personnel engagement in labour (Schaufeli & Bakker, 2004). Hence the model is suitable for studying the influence of work engagement of librarians in university libraries in North West, Nigeria.

2.3.2 Human Capital Theory developed by Schultz (1902 – 1998) (for Continuous Professional Development)

Human Capital theory was developed by a distinguished American economist and head of the Department of economics, University of Chicago Theodore William Schultz (1902 – 1998). He formulated the theory with the assistance of Gary Becker and Jacob Mincer. According to Teixeira (2014) the theory was initially propounded in 1962 by Becca and his associates. Schultz described this theory in his book titled *Investment in Human Capital*; that knowledge and skill are categories of capital in organisations, and investments in human capital leads to rise in both economic output and employees remunerations and productivity. He recommended individuals and organisations to invest in their health, internal migration, and on-the-job training. However, he focused on encouraging workers to enhance their education and training which will consequently increase their level of production and performance. Human capital is an immaterial resource not listed in the organisation's balance sheet. It can be considered as the economic value of employee's know-how and expertise. This comprises of resources like education, training, intellect, skills, wellbeing, and other things establishments worth such as faithfulness and punctuality.

Moreover, human capital stressed that not all work is equal. Nevertheless, establishments can improve the superiority of that capital by immensely investing in workers' education,

training, experience, and capabilities of workers all these have economic value for workers and for the economy as a whole. The theory capitalizes on a declaration that education, training and development are very contributory and indispensable to the development of the production capacity of any populace. The proponents of the theory maintained that educated populace is an industrious people. Hence, the theory stresses how education and training can enhanced the production and effectiveness of employees by developing the position of intellectual standard of economically creative human ability, which is a creation of innate aptitudes and venture in human beings. Providing prescribed education is well thought-out as a project in human assets, which advocates of this theory regarded it as more equivalent or even extra valuable than that of physical assets (Woodhall, 1997).

Components of the Theory

The component of this theory comprises of resources; education, skills, health, intelligence training and any other things establishments valued such as loyalty and punctuality. But for the sake of this study two of these components (Education and Training) will be considered.

Education

Education is a procedure of obtaining knowledge, expertise, values, ethics, faith, and habits. It takes place formally in schools and colleges or informally at home, with peer group, at work place with working mates and others under the guidance of teachers, mentors, supervisors among others. Though, students can also educate themselves. Adults and children are trained to obtain information and abilities considered essential in the growth and advancement of an individual and the society. Rapid advances in science and technology especially in ICTs have brought about e-learning, e-resource, e-library where an individual can learn virtually and remotely under the guidance of a teacher/librarian.

Training

Training deals with evolving a precise ability to a preferred standard through coaching and rehearsal. It is a very valuable tool which can uplift the status an employee to a standard where they can be an expert and carry out their normal labour commendably and diligently. It is the process of increasing the understanding and expertise of a worker in carrying out a specific task. Training can either be on the job training or off the job training.

Contribution of the Theory

Human capital is very essential since it is perceived to enhance output and thus cost-effectiveness. Consequently the more organisations invests in its workforce (i.e., in their education and training), the more creative and lucrative it could be. Human capital theory stresses the significance of learning and training as the basic requirements for partaking in the innovative international knowledge economy. Therefore if university libraries will adequately invest in the education and continuous training and development of their librarians they can be able to partake fully in the innovative global knowledge economy.

Critiques of the Theory

At the initial stage, Schultz experienced negative feedback or criticism from some of his colleagues (economists). Many of them declined to support the theory of seeing human beings as a form of capital, for so many reasons such as slavery, which at the time were inconceivable criticism given by the civil rights actions at that time. Schultz contends that his theory does not discharge civilisation but instead advice individuals to invest in developing their talents and know-how in line with the modern times. Human capital theory's statements are doubtful at best. In most circumstances, the theory is either not buttressed by proof, is so vague that it is untestable, or is based on circular reasoning (Fix, 2018)

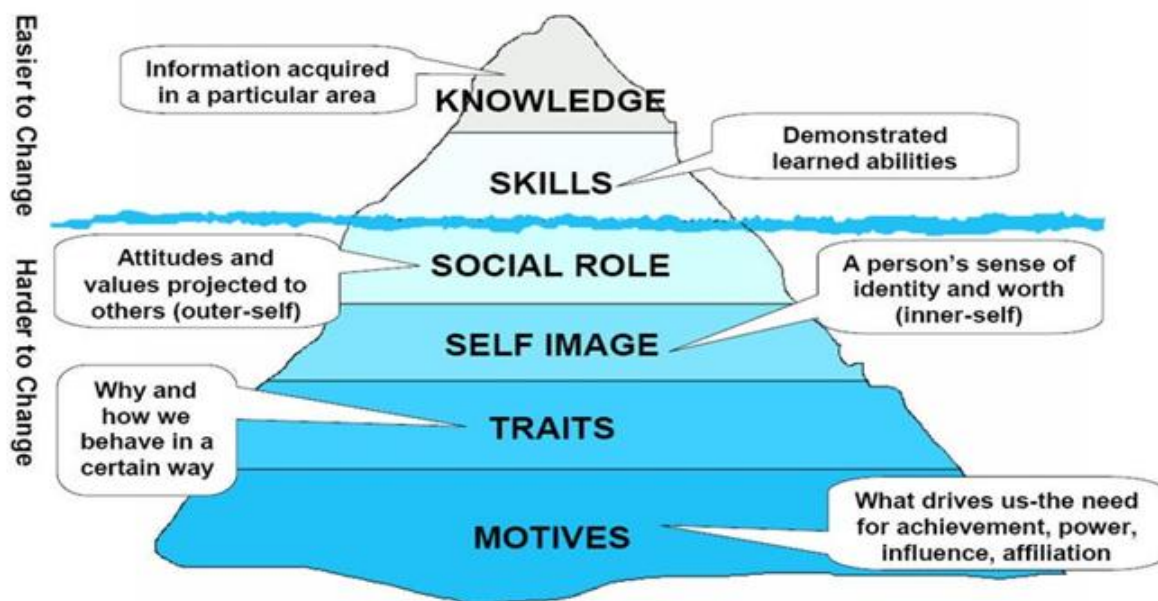
Relevance of the Theory to the study

This theory is applicable to Librarians' continuous professional development, since the theory respites on the postulation that education is extremely influential as well as essential in improving the creative capabilities of a populace. The theory depends on how education increases the output and efficacy of employees by increasing the status of logical stock of economically productive human ability, and the world is moving in a jet speed perhaps due to advances in science and technology particularly in the area of ICTs. Hence, librarians in university libraries have no other alternative than to join the race at whatever speed by continuously learning and updating new skills, knowledge and ideas so as to be up to date and remain relevant to the system.

2.2.3 Iceberg Competency Model (for Professional competencies)

Iceberg competency model was developed by Spencer and Spencer in 1993 provided a better ideas, knowledge and understanding of various sets of competencies needed by workers for higher output or performance. The competencies identified by ice berg model are: knowledge, skills, social role, self-image, traits and motives. The founders of the model further stressed that, it is not easy for an establishment to understand whether specific employee possess these five proficiencies, and that some physiognomies are not easy to obtain by teaching. Consequently, they applied the resemblance of the iceberg. The feature at the bottom of the iceberg is more concealed and not easy to develop. Iceberg model further reveals that, knowledge and skills were observable and quite surface features of persons, whereas traits and motives are deeper and more dominant to personality. Self-concept features fall anywhere in between. Concealed and observable proficiencies play not the same roles in any labour. Concealed proficiencies are the type of behavioural aptitudes that stimulate personnel performance in a job, while visible proficiencies are the technical experiences needed by employers [Spencer & Spencer 1993].

ICEBERG MODEL OF COMPETENCIES



Adapted from Spencer & Spencer [1993]

Components of the Model

The model has five major components which are briefly explained below:

Knowledge: Knowledge connotes to an organised bulk of facts, values, performs and theories that constitute the foundation for a certain field. It is assimilated facts in precise labour areas.

Skills: Refers to the use of understanding and proficiency to carry out a definite job. Knowledge and skills are essentially dissimilar.

Motives: This can be seen as psychological structures that stimulate an individual to act to a wanted objective. These are inside ambitions that result to the necessity to pursue accomplishment, supremacy and relationship.

Traits: Refers to a person's dispositional features, which can result to constant answers to circumstances and/or evidence.

Self-concept/image: means in what way someone places self. It is highly interrelated to his/her values and self-concept.

It should be noted here that, for the sake of this study two of the components of this model (knowledge and skills) will be considered which deals with the technical and essential competencies. The other component of this model concentrates on motivation which is not among the scope of this study.

Contributions

Competency models make available all-inclusive method for evaluating the proficiencies persons requires to do a particular labour. The model make available improved ideas, knowledge and thoughtful of different sets of indicators of competencies needed by workers for higher output, productivity or performance. It is very challenging for an organization to distinguish whether a specific worker holds the required proficiencies, and that some physiognomies are problematic to obtain by training. More so, the model permit organizations academic libraries inclusive to develop workers with potential by supplying a defined required knowledge, skills, abilities and behaviours needed for growth, development and success of the establishment. It also help organisations in setting the fundamental organisational abilities.

Critiques

The Iceberg Model of Competencies is not focused on the management level, the critiques of Iceberg competency model such as Antonacopoulou and Fitzgerald (as cited in Koenigsfeld et al., 2011) emphasized that no competency model can be very comprehensive as to encapsulate the entire position such as all of manager positions, within an organization. Moreover, speedy technological advancements, dynamic economic and business environments date competency models and limit their usefulness. It should be noted that these shortcomings do not undermine from the general use of iceberg competency model but rather points to the need for careful application.

Relevance of the model to the study.

This model is related to competencies in a way that it provides a better idea, knowledge and understanding of various types constructs related to competencies required by employees in organizations including librarians working in federal university libraries in North-west, Nigeria for higher work engagement as well as higher output in organizations. since this variable aims to find out the types, level of librarians competencies, its influence on the other variables. Iceberg Model assumed that for a better and higher output, productivity or performance in organisations, the staff should possess some competencies which are divided into two open or visible and hidden competencies. Concealed and observable competencies play dissimilar roles in any work. Unseen competencies refer to the type of behaviour proficiencies that motivate employees' performance in a labour, while observable proficiencies are the technical capabilities essential for the establishments (Spencer & Spencer 1993).

2.4 Conceptual frame work of Work Engagement, Continuous Professional Development and professional competencies.

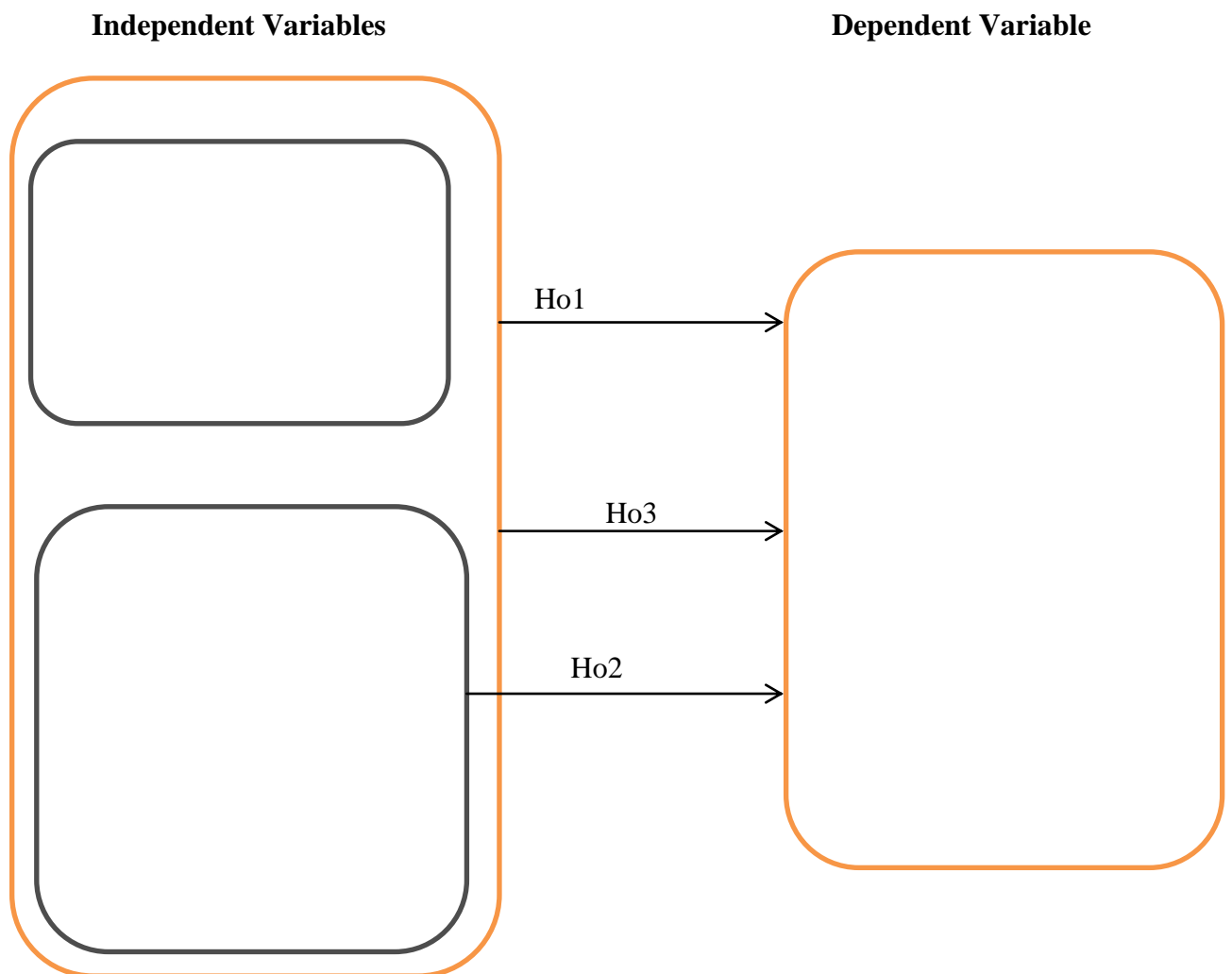


Figure 2. Conceptual model of work engagement, CPD and professional Competencies

(Source: Researcher, 2022)

The dependent and independent variables for this research are work engagement (X), continuous professional development (K) and competencies (Y) respectively. The independent variable continuous professional development (K) will be measured using the education and training and competencies will be measure using knowledge and skills whereas the dependent variable work engagement (X) will be measured with job demands and job resources.

H₀₁: It is presumed that librarians' capabilities to appreciate and apply job demand and job resources will not improve their work engagement.

H₀₂: It is assumed that if librarians continuously acquiring and attending education and training. It will not improve upon their work engagement.

H₀₃ it is assumed that librarians' work engagement will not improve meaningfully if they attend and possess both continuous professional development and competencies respectively.

The conceptual framework of this research is created based on some theories and the extensive literature review. It is separated into 2 portions: dependent and independent variables. The independent variables segment consists of 2 enclosed boxes: continuous professional development and competencies; while the dependent variable box contains one enclosed cell: Work engagement in university libraries in North West, Nigeria. The three variables are made up of the following indicators:

Dependent variable: Work Engagement.

Job demands: bodily, psychosomatic, social, or organisational aspects of the job, that require sustained bodily and/or mental effort or skills. Therefore, they are associated with certain biological and/or psychosomatic costs. They are as follows:

1. Quantitative demands: This refers to the volume of the work as well as time pressure.
2. Emotional demands: Denote mainly to the strength required to handle the logistically anticipated emotions during interpersonal relationships or transactions.
3. Cognitive demands: This concentrates on the intellectual processes concern with information processing such as the difficulty of the job.

4. Physical demands: These are mainly related with the musculoskeletal system like motoric and physical aspects of behaviour such as dynamic and static loads.

physical, psychosomatic, communal, or administrative features of the work that are either or: useful in accomplishing labour objectives; decrease job demands and the accompanying biological and psychological cost; inspire individual progress, education, and development. High job demands can lead to excessive mental tension; unless workers have enough and corresponding kinds of resources to deal with their challenging labour. They consist of the following:

1. Physical resources: These consist of facilities, equipment, tools required by workers to carry out their work effectively and easily.
2. Cognitive resources: These resources consist of information resources for obtaining vital information about the job at hand such as a handbook, manuals, training, information from co-workers and overseers.
3. Emotional resources: Supports and assistant from co-workers and patrons or clients.

Independent variable: Professional competencies

Competencies are person's internal trait that can increase the individual to perform in a way that is in agreement with the standards. Competencies are measured and equated with criteria. It can be improved through rehearsal and improvement (McClelland, 1973).

Knowledge: Knowledge connotes to an organised bulk of truths, values, performs and theories that form the foundation for a given area of human endeavour. It also refers to assimilated information in specific discipline or work areas.

Skills: Refers to the use of knowledge and expertise to execute a definite bodily or mental job.

Independent variable: Continuous professional development

Education

Education is a procedure of obtaining knowledge, expertise, values, ethics, faith, and habits. It takes place formally in schools and colleges or informally at home, with peer group, at work place with working mates and others under the guidance of teachers, mentors, supervisors among others. Though, students can also educate themselves. Adults and children are trained to acquire knowledge and expertise considered essential for the growth and

advancement of an individual and the society. Rapid advances in science and technology especially in ICTs have brought about e-learning, e-resource, e-library where an individual can learn virtually and remotely under the guidance of a teacher/librarian.

Training

Training deals with evolving a precise ability to a preferred standard through coaching and rehearsal. It is a very valuable tool which can uplift the status an employee to a standard where they can be an expert and carry out their normal labour commendably and diligently. It is the process of increasing the understanding and expertise of a worker in carrying out a specific task. Training can either be on the job training or off the job training.

2.7 Appraisal of literature

The literature reviewed for this study covered several aspects of the topic of work engagement, continuous professional development and competencies of librarians in university libraries in North West, Nigeria. The appraisal of literature is done based on the dependent variable which is the key concentration of the study (work engagement). However, the researcher has found that, though the literature dealing with the study treated the variables of the research, but the literature reviewed might not offer satisfactory association between the variables; precisely, literature dealing with the variables are inadequate as to the combined effect of continuous professional development and work engagement.

However, some of the major findings from the literature reviewed showed that, the level of work engagement among librarians is very low, despite the fact that work engagement is one of the basic requirements for job performance and also facilitates the attainment of organisational aims and objectives. The reviewed literature on these variables was carried out mostly by foreign authors or scholars and very few local authors or scholars. It should be noted that all those studies have not combined these variables together in one research. Conversely, gap to be filled has been recognised from the reviewed literature. It is noticeable from the knowledge of the researcher that there is no research that has been done which combined the variables of this study: Continuous professional development, competencies and work engagement among librarians in federal university libraries in North West, Nigeria. Similarly, from the reviewed literature in this study, it showed that there was no single study that combines the influence of the two independent variables that is continuous professional development and competencies on the dependent variable of work engagement.

CHAPTER THREE

METHODOLOGY

This chapter focused on the methodology to be adopted for the study. It gives details on methods or procedures to be employed in conducting the study. The chapter is presented under the following sub-headings:

- 3.1 Research Design
- 3.2 Population of the study
- 3.3 Sample size and sampling Technique
- 3.4 Research Instrument
- 3.5 Validity and Reliability of the Instrument
- 3.6 Method of Data Collection
- 3.7 Method of Data Analysis
- 3.8 Ethical Consideration.

3.1 Research Design

For the purpose of this research, the Survey research design was adopted. The survey design is chosen because it is relatively convenient and affordable, data collection is easier, sources of data are easy to use, easy to read. It can be gathered and studied as desired for research needs using questionnaire as an instrument. It is capable of gathering a comprehensive variety of data and measure variables such as knowledge, favourites, attitudes, feelings, theories, morals and behaviour (Defranzo, 2012).

3.2 Population of the study

The population for the survey is consisting of three hundred and twenty six (326) librarians in federal university libraries in North-West, Nigeria. The choice of federal universities in North-West is based on the fact that federal universities have more resources, facilities, services and experienced staff.

Table 1: List of librarians in federal university libraries in North-West, Nigeria.

S/N	Name of University	Acronyms	Year of Establishment	No. of Librarians
1	Ahmadu Bello University, Zaria	ABU	1962	125
2	Air Force Institute of Technology, Kaduna	AFIT	2018	18
3	Bayero University, Kano	BUK	1975	35
4	Federal University, Birnin Kebbi	FUBK	2013	15
5	Federal University, Dutse, Jigawa	FUD	2011	17
6	Federal University, Dutsin-Ma, Katsina	FUDMA	2011	37
7	Federal University, Gusau Zamfara	FUGUS	2013	19
8	Nigeria Police Academy Wudil	NPA	2013	13
9	Nigerian Defence Academy Kaduna	NDA	1985	15
10	Usumanu Danfodiyo University	UDUSOK	1975	32
Total = 326				

Source: Offices of the University Librarians, 2021

3.3 Sample size and sampling Technique

Sample refers to the systematic and carefully selected representative of the population of a study. Usually, if the population is too large for the researcher to study all the members, a small, but carefully selected sub-set of the population can be used to represent the entire population (Ibrahim, 2013). In the case of this study total enumeration was applied for the study since the size of the population is not large and it is homogeneous. Some scholars such as Morris (2015) recommended total enumeration when the population is small. The entire three hundred and twenty six (326) librarians in federal university libraries in North -West, Nigeria was used for the research. One of the merits of this method is that it allows the researcher to circumvent sampling errors, since the entire population is encompassed in the study. It is scientific and rigorous to study an entire population. It helps to get deep insights into population interested in (Arnab, 2017). More so, Morris (2015) emphasised when working with a smaller size population total enumeration is recommended. For precision, one

wants virtually the whole population for attaining correctness, and the researcher got extensive study of the population, with great level of precision in data assemblage, it also eradicates mistakes and unfairness in sampling. These are the reasons why total enumeration was adopted for the study.

3.4 Research Instrument

A structured questionnaire was used for data collection. The researcher used both self-developed and adapted questionnaire scales for the survey. The work engagement scale was adapted from Grigsby (2013). While the continuous professional development scale and professional competencies scales were developed by the researcher. Kothari (2004) maintained that questionnaire is the heart of a survey study. Questionnaire is more economical and the respondents are literate and capable of completing the questionnaire, hence the choice of questionnaire as instrument for data collection. The questionnaire was titled: continuous professional development, professional competencies and work engagement. The instrument was sub-divided into 5 sections: A, B, C, D and E.

Section A: Demographic information. This section made up of six (6) items sought demographic data of the respondents - their age, sex, qualification, designation, department and working experience.

Section B: Level of work engagement: This section comprised 35 questions relating to quantitative demand, cognitive demand, emotional demand, physical demand, cognitive job resources, physical job resources and emotional job resource with some questions under each of the items that measures work engagement. Four-point likert response format was used on a scale of 1= Very low level, 2= Low level, 3 = High level, 4 = Very high level.

Section C: Level of continuous professional development: This section consists of ten (10) items relating to education and training. Four-point Likert response format was used on a scale of 1= Very low level, 2= Low level, 3 = High level, 4 = Very high level.

Section D: Level of competencies. It contained twenty (20) statements relating to Knowledge and skills. The respondents were required to use four-point likert response format of 1= Very low level, 2= Low level, 3 = High level, 4 = Very high level.

Section E: Constraints of work engagement among librarians in federal university libraries in North- West, Nigeria. It is made up of seven items. Options were given to the respondents to choose the appropriate ones ranging from 1= Strongly disagree, 2= Disagree, 3 = Agree, 4 = Strongly disagree. The questionnaire was self-structured.

3.5 Validity and Reliability

The questionnaire was given to the thesis supervisor, another expert in the area of the variables and some senior librarians particularly those with PhD in library and information science for their advice, positive criticisms and assistance in order to validate the research instrument. In accordance with their positive criticism, the researcher modified the instrument where required. Miller (2011) describes content validity as the grade to which the instrument completely evaluates or measures the construct of concentration, whereas face validity is a constituent of content validity and is formed when a person re-examining the instrument arrives that it measures the characteristic or trait of concern. Construct validity and content validity was successfully carried out.

A pre-test was conducted at University of Abuja library. Forty (40) copies of the questionnaire were shared and retrieved from the librarians. The pre-test involved a pre-survey in order to plug mistakes, abnormalities and also to guarantee the consistency and significance of the research instrument. A pre-test was considered essential in order to define the preparedness of the respondents, to get a precognition of the feedback of the librarians and to regulate the consistency and validity of the instrument when applied in federal university libraries in North-West, Nigeria. See table 3.2

Table 3.2

Variables	No. of Items	Cronbach's Alpha
Work engagement	35	0.975
Continuous professional development	10	0.775
Professional Competencies	20	0.868

The variables for the study were laid open to reliability test via SPSS version 25. A questionnaire scale is regarded valid if the Crum batch alpha is 0.7 and above. As it can be seen from Table 3.2 above, the values of the three variables are 0.975, 0.775 and 0.868 hence; the instrument is valid and reliable.

Table 3.3: Principal component factor analysis (Construct validity)

S/N	Variables	No. of items	KMO	Bartlett's test of sphericity	Sig
1.	Work engagement				
	Quantitative Demands	5	0.534	32.106	.000
	Cognitive Demands	5	0.646	32.878	.000
	Emotional Demands	5	0.554	30.287	.000
	Physical Demands	5	0.676	25.363	.005
	Physical Job Resources	5	0.819	30.871	.001
	Cognitive Job Resources	5	0.780	38.193	.000
	Emotional Job Resources	5	0.838	33.757	.000
2.	Continuous Professional Development				
	Education	5	.795	27.259	.002
	Training	5	.568	21.601	.017
3.	Professional Development				
	Knowledge	10	.559	48.649	.001
	Skills	10	.563	34.728	.003

In order to make the content validity stronger and better, a principal component factor analysis was conducted to test the sampling adequacy. The usually applied procedures are Kaiser-Meyer-Olkin (KMO) and Bartlett's test of Sphericity. These are used in testing the significance of variables in the research and to certify that the content measures what it supposes to measure in each variable. The suitable KMO value for a factor to be significant

is within zero to one (0-1) and an index of above 0.5 is acceptable. The acceptable Bartlett's Test of Sphericity index is required to be less than 0.05. As available in table 3.2 result of the KMO and Bartlett's Test of Sphericity indices for all the variables were greater than 0.5 and less than .05 correspondingly. This suggests that they have reached the standards needed for an instrument to be valid and reliable. Consequently, all the variables possess the satisfactory indices and the constructs considered valid for the measurement of the variables.

3.6 Procedure for Data Collection

The procedure of data collection started with the presentation of introductory letters introducing the research. The letter was collected from the Department of Information Resources Management addressed to the respective institutions on the request of the researcher. A clearance certificate was acquired from the Babcock University Health Research Ethics Committee (BUHREC), Babcock University, Ilishan Remo, Ogun State. A consent form was also given by the researcher and the research assistants to the respondents to ensure the libraries and their respective librarians that participation in the research is of research benefits and that the information solicited are for the study purposes only and that data generated will be treated with maximum confidentiality. The researcher gave the research assistants three (3) day intensive training in what manner to distribute and retrieve questionnaire from the respondents before proceeding to the field. The researcher with the assistance of three trained research assistants administered and retrieved the questionnaire from the librarians in federal university libraries in North- West, Nigeria. The distribution and retrieval of the questionnaires was done by visiting the librarians in their various offices in the different libraries studied. A period of three (3) weeks was set aside for the distribution and collection of questionnaire from the librarians.

Method of Data Analysis

Data collected for the study was analysed via Statistical Product and Service Solutions software (SPSS Version 25). See table three:

Table 2: Methods of Data Analysis

S/N	Statistical Analytic Techniques		Data
1	Descriptive	Frequency count and percentages	Demographic data
		Frequency count, percentages, means, and standard deviation	Research questions 1-4
2	Inferential	Simple linear regression analysis	Hypotheses 1-2
		Multiple linear regression analysis	Hypotheses 3- 4

From Table 2, descriptive analytic techniques using frequency count and percentages was used to analyse demographic data while frequency count, percentages, means, and standard deviation was applied to answer research questions 1-4. Furthermore, inferential analytic statistical techniques using simple linear regression analysis was used to test hypotheses 1-2 while hypothesis 3 was tested using multiple linear regression analysis.

3.8 Ethical Consideration

Ethical endorsement to commence the research was sought from Babcock University Research Ethical Committee (BUHREC). Before administering the questionnaire to the respondents, informed consent form of participants was given prior to participation in the study. No participant was forced in any way to partake in the survey. They filled in the questionnaire incognito. Confidentiality of the responses was maintained and was used only for study resolutions. All sources consulted and cited in the work were dully acknowledged. Also the work was subjected to turn - it - in plagiarism test. See appendix v.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION OF FINDINGS

This chapter is presented in four (4) major components viz: analysis of the demographic information of the respondents, analysis of research questions, test of research hypothesis and discussion of major findings. Out of three hundred and twenty six (326) copies of the questionnaires distributed to the respondents three hundred and five (305) were returned within a period of three weeks respond period. A total of 93.6% respond rate was recorded. The entire questionnaire returned were processed in SPSS version 25 and provided answers to the research questions and hypotheses raised in the study.

The chapter was discussed under the following subheadings:

4.1 Analysis of the demographic information of the respondents

4.2 Analysis of the Research questions

4.1 Analysis of the demographic data of the respondents

The respondents for this study were professional librarians in the federal university libraries in North-West. The main demographic data considered are: name of university, gender, marital status, age, educational qualification, designation and years in service.

Table 4.1: Demographic characteristics of the respondents

Characteristics	Names of Universities	Frequency	Percentage
University	Ahmadu Bello University, Zaria	123	40.3
	Air Force Institute of Technology, Kaduna	16	5.2
	Bayero University, Kano	33	10.8
	Federal University, Birnin Kebbi	14	4.6
	Federal University, Dutsin-Ma, Katsina	34	11.1
	Federal University, Gusau Zamfara	18	5.9
	Federal University, Dutse, Jigawa	15	4.9
	Nigerian Defence Academy Kaduna	10	3.3
	Nigeria Police Academy Wudil	12	3.9

	Usumanu Danfodiyo University	30	9.8
Gender	Male	231	75.7
	Female	74	24.3
Marital Status	Single	37	12.1
	Married	265	86.9
	Divorced	3	1.0
Age	below 30 years	50	16.4
	31-40 years	121	39.7
	41-50 years	77	25.2
	51-60 years	52	17.0
	above 60 years	5	1.6
Educational Qualification	BSc/BA	128	42.0
	MLS/MSc	154	50.5
	PhD	23	7.5
Designation	Assistant Librarian	83	27.2
	Librarian II	57	18.7
	Lecturer I	56	18.4
	Senior Librarian	85	27.9
	Principal Librarian	24	7.9
Years of Service	Below 6	91	29.8
	6-10 years	114	37.4
	11-15 years	31	10.2
	16-20 years	26	8.5
	21-25 years	21	6.9
	26-30 years	3	1.0
	above 30 years	19	6.2

Source: Researcher's field work, 2022

The result presented in Table 4.1 reveals the demographic characteristics of the participants of the study. The result show that the institutions represented in the study, Ahmadu Bello University is has the highest percentage of librarians' respondents (40.3%) while respondents

from Nigerian Defence Academy Kaduna has the lowest percentage of librarians' respondents (3.3%). It also shows that there were 231 (75.7%) male and 74 (24.3%) female in the study. Also, 265 (86.9%) of the respondents were married, 121 (39.7%) were 31-40 years old. While 128 (42%) of the respondents had Bachelor's Degree, 154 (50.5%) of the respondents had Master degree. On designation, the result reveals that 85 (27.9%) of the respondents were Senior Librarians, 83 (27.2%) were Assistant Librarians, while 57 (18.7%) and 56 (18.4%) were Librarian II and Librarian I respectively. Finally, the result also reveals that 114 (37.4%) of the respondents had work experience of 6-10 years, and 91 (29.8%) had served for below 6 years, this implies that majority of the librarians in this study have just begun their careers in the library profession.

4.2 Analysis of research questions

This segment presents the descriptive analysis of all the research variables to answer the research questions recognized during the survey data. In the descriptive analysis, the dependent variable was analysed first and then followed by the independent variables using the data analysis layout as contained in the methodology section of this study.

4.2.1 Analysis of research question 1

Research question one: What is the level of work engagement of librarians in federal university libraries in North-West, Nigeria?

This question requires the determination of the level of work engagement of librarians in federal university libraries in North-West, Nigeria as contained in the specific objectives of the study.

Table 4.2 Showing the level of work engagement of librarians in federal universities in North-West, Nigeria.

level of Work Engagement	Very high level (%)	High level (%)	Low level (%)	Very Low level (%)	Mean	SD
Job demands					2.87	.861
Quantitative demands					2.64	.905
The degree which the quantity of library work assigned to you has intruded into your private life is	102(33.4)	118(38.7)	61(20)	24(7.9)	2.98	.923
To what magnitude the quantity of library job assigned has not made you meet the job demand target	67(22)	162(53.1)	55(18)	21(6.9)	2.90	.817
Relaxation is affected by the quantity of the job carried out in the library to a	88(28.9)	61(20)	129(42.3)	27(8.9)	2.69	.986
To what extent the quantity of library work assigned has lowered your self-esteem	36(11.8)	99(32.5)	130(42.6)	40(13.1)	2.43	.864
state the extent of responsibilities assigned to you	34(11.1)	68(22.3)	129(42.3)	74(24.3)	2.20	.934
Cognitive demands					2.88	.924
To what grade cognitive demands of the job requires the understanding of the job expectation	102(33.4)	140(45.9)	36(11.6)	27(8.9)	3.04	.899
Describe the degree you think critically to bring solutions to office matters	87(28.5)	158(51.8)	29(9.5)	31(10.2)	2.99	.888
Rate the extent at which cognitive demands are critical to solution of office problems	80(26.2)	151(49.5)	46(15.1)	28(9.2)	2.93	.882
The cognitive demands of the job is open to new approaches to improve the job	74(24.3)	157(51.5)	36(11.8)	38(12.5)	2.88	.920
When some apparatus does not operate well in the library, rate the amount of solution offered	66(21.6)	103(33.8)	78(25.6)	58(19)	2.58	1.030
Emotional demands					3.05	.743
Rate the degree of your self-control when interacting with the library patrons	99(32.5)	157(51.5)	49(16.1)		3.16	.678
Describe the extent of supportive feedback given to library patrons	102(33.4)	146(47.9)	54(17.7)	3(1)	3.14	.730
What is the extent of attempt to convince patrons to support library system and services?	90(29.5)	156(51.1)	50(16.4)	9(3)	3.07	.757
Rate the level of politeness when dealing with colleagues and library patrons	77(25.2)	144(47.2)	79(25.9)	5(1.6)	2.96	.760
Describe the intensity of kindness and gentleness when dealing with patrons	79(25.9)	143(46.9)	73(23.9)	10(3.3)	2.95	.793
Physical demands					2.89	.870
The demands for standing to carry out library work is	74(24.3)	170(55.7)	48(15.7)	13(4.3)	3.00	.757
Rate the demands for sitting down to	98(32.1)	109(35.7)	87(28.5)	11(3.6)	2.96	.867

carry out library work						
Rate the demands for carrying books and other information resources from one location to another	89(29.2)	123(40.3)	76(24.9)	17(5.6)	2.93	.873
What is extent of demands for standing to carry out my library work	80(26.2)	114(37.4)	84(27.5)	27(8.9)	2.81	.927
Describe the extent of demands for operating computer in carrying out library job	71(23.3)	123(40.3)	79(25.9)	32(10.5)	2.76	.927
Job Resources					2.68	.825
Physical job resources					2.58	.864
Describe the availability of tools, facilities and equipment used to carryout library work	51(16.7)	131(43)	96(31.5)	27(8.9)	2.68	.856
Rate the degree of suitability of the tools, facilities and equipment used to carryout library job	40(13.1)	141(46.2)	91(29.8)	33(10.8)	2.62	.847
What is the extent of maintaining these tools, equipment and facilities	39(12.8)	141(46.2)	92(30.2)	33(10.8)	2.61	.844
To what extent is the lightening and office accommodation	27(8.9)	132(43.3)	116(38)	30(9.8)	2.51	.791
The extent of silence and ventilation in my working environment is	55(18)	93(30.5)	103(33.8)	54(17.7)	2.49	.984
Cognitive Job resources					2.80	.799
Rate the degree of consulting manuals , handbooks and other resources for information about library work	67(22)	145(47.5)	67(22)	26(8.5)	2.83	.868
Rate the level of use of the information retrieved from manual , handbooks and other resources for library job	57(18.7)	160(52.5)	64(21)	24(7.9)	2.82	.825
Describe the amount of assistance received from colleagues in relation to library work	65(21.3)	146(47.9)	69(22.6)	25(8.2)	2.82	.859
I learn more about my job from my supervisor in office to a	38(12.5)	173(56.7)	85(27.9)	9(3)	2.79	.691
Rate the extent of navigating online to find resources for library patrons	42(13.8)	157(51.5)	91(29.8)	15(4.9)	2.74	.753
Emotional Job resources					2.67	.812
My degree of interaction with difficult patrons at work is	63(20.7)	154(50.5)	60(19.7)	28(9.2)	2.83	.862
Rate the degree at which library work put you in emotional upsetting conditions	52(17)	157(51.5)	83(27.2)	13(4.3)	2.81	.762
The extent of control of my emotions when dealing with my colleagues in working place is	41(13.4)	163(53.4)	67(22)	34(11.1)	2.69	.841
Describe the amount of control of emotions when dealing with library patrons	38(12.5)	118(38.7)	139(45.6)	10(3.3)	2.60	.746
To what extent do you contact co-workers when in trouble with library work	30(9.8)	112(36.7)	121(39.7)	42(13.8)	2.43	.848
Grand Mean					2.79	.845

Source: Researcher's field work, 2022

Decision rule: 1.5-2.0=Very low level, 2.1-2.49, low level, 2.5-3.49= high level, 3.5-4.0=very high level

The result on the level of work engagement of the respondents as presented in Table 4.2 reveals that their work engagement level is high (grand mean=2.79, SD=.845). Furthermore, level of job demand was high (mean=2.87) as well as the level of job resources (mean=2.68). Under job demands, the result revealed that quantitative demands was high (mean=2.64), also, cognitive demands (mean=2.88), emotional demands (mean=3.05), and physical demands (mean=2.89), were all high. Similarly, under job resources, level of physical job resources was high (mean=2.58). Cognitive job resources (2.80), and emotional job resources (mean=2.67) were also high.

4.2. Research question 2: What is the level of continuous professional development of librarians in federal universities in North-West, Nigeria?

This question sought to find out the level of continuous professional development of librarians in federal universities in North-West, Nigeria as contained in the specific objectives of the study.

Table 4.3 level of continuous professional development of librarians in federal universities in North-West, Nigeria

Level of Continuous Professional Development	Very high level (%)	High level (%)	Low level (%)	Very Low level (%)	Mean	SD
Education					2.25	.921
State the level at which your organization release you for work study	21(6.9)	132(43.3)	107(35.1)	45(14.8)	2.42	.824
The extent to which my organisation sponsored staff to further education is	30(9.8)	85(27.9)	120(39.3)	70(23)	2.25	.919
The available grants to further our education in our organisation is	26(8.5)	93(30.5)	118(38.7)	68(22.3)	2.25	.899
The extent I further my education through the distance learning system is	18(5.9)	89(29.2)	124(40.7)	74(24.3)	2.17	.863
I further my education via the online platforms to a	20(6.6)	86(28.2)	121(39.7)	78(25.6)	2.16	.882
Training					2.43	.921
My level of attending webinars and other online trainings is	54(17.7)	125(41)	74(24.3)	52(17)	2.59	.969
The extent I attended seminars, conferences and	29(9.5)	128(42)	106(34.8)	42(13.8)	2.47	.847

workshops is						
The amount of attending in-house training with external resource persons is	48(15.7)	84(27.5)	117(38.4)	56(18.4)	2.41	.962
The amount of training I receive informally from my supervisors and colleagues in office is	47(15.4)	87(28.5)	108(35.4)	63(20.7)	2.39	.981
The magnitude at which I attended on the job training programme is	28(9.2)	88(28.9)	141(46.2)	48(15.7)	2.31	.846
Grand Mean					2.34	.899

Source: Researcher's field work, 2022

Decision rule: 1.5-2.0=Very low level, 2.1-2.49, low level, 2.5-3.49= high level, 3.5-4.0=very high level

As presented in table 4.3, the level of continuous professional development was low (Grand mean=2.34, SD=.899). This implies that the librarians may not be embarking on further studies to improve their knowledge and skills. The study also revealed that their level of education (mean=2.25) as well as their level of training (Mean=2.43) were low. Furthermore, the result revealed that on education, the respondents indicated on the average that the intensity of work study to further their education in their organizations was low (mean=2.42). In the same vein, the extent to which their organizations sponsored them to further their education was low (mean=2.25), as well as the availability of grants in their organization to further their education (mean=2.25) was also low. Similarly, on training, the respondents indicated that the extent they attend seminars, conferences, and workshops (mean=2.47) was low, as well as the amount of attending in-house training with external persons (mean=2.41). However, their magnitude of attending webinars and other online trainings was on the average (mean=2.59). The implication of these findings is that librarians studied may not possess the relevant knowledge and expertise to effectively perform their work. Also, they may not be current and up-to-date in their profession and this will subsequently affect their level of work engagement as well as the attainment of organizational aims and objectives.

Research question 3: What is the level of professional competencies of librarians in federal universities in North-West, Nigeria?

This question sought to find out the level of professional competencies of librarians in federal university libraries in North-West, Nigeria as stated in the third specific objectives of the study.

Table 4.4: Level of professional competencies of librarians in federal universities in North-West, Nigeria

Indicate your level of competencies	Very high level (%)	High level (%)	Low level (%)	Very Low level (%)	Mean	SD
Knowledge					2.94	.750
My understanding of how to evaluate different information sources is	67(22)	188(61.6)	47(15.4)	3(1)	3.05	.642
My expertise to process various information resources in the library is	88(28.9)	143(46.9)	67(22)	7(2.3)	3.02	.776
My ability to select various information resources into the library is	71(23.3)	169(55.4)	54(17.7)	11(3.6)	2.98	.745
My awareness of various information resources in various formats is	81(26.6)	150(49.2)	58(19)	16(5.2)	2.97	.817
My understanding of how to motivate workers toward the attainment of organisational aims and objectives is	84(27.5)	130(42.6)	88(28.9)	3(1)	2.97	.777
My familiarity with the sophisticated and emerging technologies used in service delivery in our libraries is	67(22)	163(53.4)	72(23.6)	3(1)	2.96	.704
The extent to which I can retrieve relevant information for the patrons is	75(24.6)	149(48.9)	68(22.3)	13(4.3)	2.94	.798
The extent to which I can determine the information needs of our library patrons is	61(20)	166(54.4)	65(21.3)	13(4.3)	2.90	.759
My expertise to disseminate relevant information in different format to the patrons is	52(17)	165(54.1)	75(24.6)	13(4.3)	2.84	.750
My capacity to conduct various researches to find solution to many existing problems in my library is	50(16.4)	150(49.2)	98(32.1)	7(2.3)	2.80	.733
Skills					2.84	.807
My capability to communicate fluently is	103(33.8)	139(45.6)	44(14.4)	19(6.2)	3.07	.854
My ability to communicate politely is	99(32.5)	128(42)	55(18)	23(7.5)	2.99	.900
My ability to handle digital information resources is	61(20)	171(56.1)	60(19.7)	13(4.3)	2.92	.750
My capacity to use and apply matters of information privacy and security in electronic environment is	80(26.2)	138(45.2)	70(23)	17(5.6)	2.92	.843
The extent to which I can apply copyright law is	48(15.7)	155(50.8)	91(29.8)	11(3.6)	2.79	.746
My ability to disseminate information resources ethically is	58(19)	144(47.2)	82(26.9)	21(6.9)	2.78	.831
My capability to organise information resources ethically is	45(14.8)	164(53.8)	74(24.3)	22(7.2)	2.76	.790
The extent to which I can use sophisticated	66(21.6)	117(38.4)	98(32.1)	24(7.9)	2.74	.887

and emerging technologies in service delivery in our libraries is						
My capacity to manipulate multimedia information resources is	38(12.5)	165(54.1)	85(27.9)	17(5.6)	2.73	.747
My proficiency to handled plagiarism is	28(9.2)	164(53.8)	94(30.8)	19(6.2)	2.66	.731
Grand Mean					2.88	.779

Source: Researcher's field work, 2022

Decision rule: 1.5-2.0=Very low, 2.1-2.49, low, 2.5-3.49= high, 3.5-4.0=very high

The result in table 4.4 presents the participants responses on their level of professional competencies. The grand mean revealed that the librarians professional competencies was high (grand mean=2.88, SD=.779). This implies that the librarians are professionally competent. The result also revealed that professional knowledge (mean=2.94), as well as skills (mean=2.84) of the respondents were also high. On the professional knowledge of Librarians, the respondents indicated that their understanding of how to evaluate different information sources (mean=3.05), expertise to process various information resources in the library (mean=3.02), and their knowledge on how to select various information resources into the library (mean=2.98), were high. Similarly, on professional skills, the respondents indicated that their capability to communicate fluently (mean=3.07), and politely (mean=2.99), and ability to handle digital information resources (mean=2.92) were high. The implication of these findings is that librarians possess high level of competencies, which will assist in developing a strong organizational culture, build a more dedicated workforce. They will also assist in ensuring consistent performance standards for librarians, which can promote work engagement, retention and realization of the organizational aims and objectives.

Research question 4: What are the constraints of work engagement of librarians in federal university libraries in North-West, Nigeria?

This question sought to find out the constraints of work engagement of librarians in federal universities in North-West, Nigeria as itemized in the specific objectives of the study.

Table 4.5: The constraints of work engagement of librarians in federal universities in North-West, Nigeria.

Table 4.5: Constraints of work engagement among librarians

Constraints of work engagement	Strongly Agree	Agree	Disagree	Strongly disagree	Mean
Lack of work life balance	91(29.8)	131(43)	70(23)	13(4.3)	2.98
Inadequate skills set	73(23.9)	156(51.1)	63(20.7)	13(4.3)	2.95
Lack of growth and recognition	72(23.6)	122(40)	92(30.2)	19(6.2)	2.81
Opportunity growth needs of the employees active engagement.	53(17.4)	170(55.7)	54(17.7)	28(9.2)	2.81
Managers and workers misunderstanding of work engagement	61(20)	135(44.3)	75(24.6)	34(11.1)	2.73
Lack of co-operation and co-ordination from management	51(16.7)	118(38.7)	100(32.7)	36(11.8)	2.60
Job security	58(19)	100(32.8)	91(29.8)	56(18.4)	2.52

Table 4.5 enumerates the factors that challenge the work engagement of librarians in federal universities in North-West, Nigeria. The respondents on the average indicated that lack of work life balance (mean=2.98), inadequate skills set (mean=2.95), lack of growth and recognition (2.81), opportunity growth needs of the employees active engagement (mean=2.81), and managers and workers misunderstanding of work engagement (mean=2.73), as well as lack of co-operation and co-ordination from management (mean=2.60), and job security, were the issues that constrained the work engagement of the librarians.

4.3 Testing of research hypothesis

Data collected for the study was analysed using simple and multiple linear regression and reported in Table 4.6 – 4.9.

4.3.1 Research hypothesis 1

Hypothesis one (H_{01}) Continuous professional development of librarians in federal universities in North-West, Nigeria will not significantly influence their work engagement.

Hypothesis one was tested with simple linear regression analyses. The result of regression analysis is presented in table 4.6

Table 4.6: influence of continuous professional development on work engagement

Variables	<i>B</i>	<i>T</i>	<i>Sig.</i>	<i>R</i> ²	<i>F(df)</i>	<i>ANOVA (Sig.)</i>
(Constant)	64.254	26.239	.000	.410	104.843 (2,302)	.000
Education	.463	7.506	.000			
Training	.224	3.628	.000			
Dependent Variable: Work Engagement Predictor: Continuous Professional Development DF (F Statistic) = 2, 302 T Statistic (DF) = (304) 14.242						

Source: Field Survey Results (2022)

The result presented in table 4.7 reveals that continuous professional development ($R^2=.410$, $\beta=.633$, $F(2,302) = 104.843$, $p<0.05$) had significant influence on work engagement of librarians. The result further exposed that continuous professional development was responsible for 41% ($R^2=.410$) of the variation in librarians work engagement, while the other 59% can be accounted for by other variables that can influence work engagement but are not included in this model. On relative contribution, the result revealed that Education ($\beta=.463$, $t=7.506$, $p<0.05$), and training ($\beta=.224$, $t=3.628$, $p<0.05$), were found to have significant influence on their work engagement, which implies that librarians education was responsible for 46.3% of the variation in work engagement, and training was responsible for 22.4% of the variations in work engagement as well. Hence, the null hypothesis is rejected and restated: Continuous professional development of librarians in federal universities in North-West, Nigeria will significantly influence their work engagement.

Hypothesis 2 (Ho₂): Librarians professional competencies do not significantly influence their work engagement in federal universities in North-West, Nigeria

Hypothesis 2 was tested with simple linear regression analyses. The result of regression analysis is presented in table 4.8

Table 4.7: Influence of librarians professional competencies on work engagement

Variables	<i>B</i>	<i>T</i>	<i>Sig.</i>	<i>R</i> ²	<i>F(df)</i>	<i>ANOVA (Sig.)</i>
(Constant)	39.824	11.415	.000	.485	142.266 (2,302)	.000
Knowledge	.402	8.301	.000			
Skills	.396	8.169	.000			
Dependent Variable: Work Engagement Predictor: Competencies DF (F Statistic) = 2, 302 T Statistic (DF) = (304) 11.541						

Source: Field Survey Results (2022)

The result presented in table 4.8 shows that the librarian competencies ($R^2=.485$, $\beta =.696$, $F(2,302) = 142.266$, $p<0.05$) do have significant influence on work engagement of librarians. The result revealed that librarians competencies accounts for 48.5% ($R^2=.485$) of the changes in librarians work engagement. This implies that increase in the level of Librarians professional competencies will increase their level of work engagement. Furthermore, the result reveals that librarians knowledge ($\beta=.402$, $t=8.301$, $p<0.05$), and skills ($\beta=.396$, $t=8.169$, $p<0.05$), were found to have significant influence on their work engagement, and this implies that librarians knowledge and skill were good predictors of work engagement. Therefore, the null hypothesis is rejected and restated: Librarians professional competencies do significantly influence their work engagement in federal university libraries in North-West, Nigeria

Hypothesis 3: (H₀₃) continuous professional development and librarians professional competencies will not relatively influence their work engagement in federal universities in North-West, Nigeria.

Table 4.8 Relative influence of continuous professional development and competencies.

Variables	B	T	Sig.
(Constant)	34.257	11.072	.000
Continuous Professional Development	.393	9.603	.000
Competencies	.512	12.506	.000
Dependent Variable: Work Engagement Predictor: Continuous Professional Development ,Competencies DF (F Statistic) = 2, 302 DF (T Statistic) = 304			

Source: Field Survey Results (2022)

The result presented in table 4.9 reveals the relative contribution of continuous professional development and librarians competencies to the variations in work engagement of librarians in federal university libraries in North-West, Nigeria. The result revealed that continuous professional development ($\beta = .393$, $t = 9.603$, $p < 0.05$) had significant influence on work engagement of librarians and is responsible for 39.3% of the changes in work engagement. Also, Librarians professional competencies ($\beta = .512$, $t = 12.506$, $p < 0.05$), was found to have significant influence on work engagement of librarians, and is accountable for 51.2% of the variation in work engagement. Hence, the null hypothesis is rejected and restated: Continuous professional development and librarians professional competencies will relatively influence their work engagement in federal universities in North-West, Nigeria.

Research hypothesis 4: (H₀₄) continuous professional development and librarians professional competencies will not jointly influence their work engagement in federal university libraries in North-West, Nigeria.

Hypothesis 4 was tested with multiple regression analyses. The result of regression analysis is presented in table 4.9

Table 4.9: Joint influence of continuous professional development and librarians competences

	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>Adj. R²</i>	<i>F</i>	<i>Sig.</i>
Regression	36614.054	2	18307.027	.603	231.627	.000
Residual	23869.080	302	79.037			
Total	60483.134	304				

Dependent Variable: Work Engagement
 Predictor: Continuous Professional Development ,Competencies
 DF (F Statistic) = 2, 302
 DF (T Statistic) = 304

Source: Field Survey Results (2022)

The result presented in table 4.10 shows that there is a joint significant influence of continuous professional development and librarians professional competencies ($Adj. R^2=.603$, $F(2,302) = 231.627$, $p<0.05$) on work engagement of librarians in federal universities in North-West, Nigeria, and that both variables together are responsible for 60.5% of the changes in work engagement of librarians. This implies that continuous professional development and Librarians professional competencies were good predictors of work engagement. Therefore, the null hypothesis is rejected and restated: Continuous professional development and librarians professional competencies will jointly influence their work engagement in federal universities in North-West, Nigeria.

Table 4.10 Summary of the results on research questions

Research Questions	Results on main variable	Results on dimension of variable
What is the level of work engagement of librarians in in federal university libraries in North-West, Nigeria?	The level of work engagement of librarians in in federal university libraries in North-West, Nigeria was high (grand mean = 2.79) on a scale of 4.	Of the two dimension of work engagement, job demand was high with (weighted mean=2.87) and the job resources was low (weighted mean=2.68).
What is the level of continuous professional development of librarians in federal university libraries in North – West, Nigeria?	The level of continuous professional development of librarians in federal university libraries in North-West, Nigeria was low (Grand mean = 2.34) on a scale of 4.	Of the two dimension of continuous professional development of librarians, education was high with (weighted mean = 2.25) training was low with (weighted mean = 2.43).
What is the level of librarians competencies in federal university libraries in North-West, Nigeria?	The level of librarians competencies in federal university libraries in North-West, Nigeria was high. (Grand mean=2.88) on a scale of 4.	Of the two dimension of competencies, knowledge was high with (weighted mean = 3.94) skills was low with (weighted mean = 2.84).
What are the constraints to work engagement of librarians in federal university libraries in North-West, Nigeria?		Lack of work life balance constitutes the highest constrains to work engagement with (weighted mean = 2.98) while Job security was low with(weighted mean = 2.52)

Table 4.11 Summary of linear regression analysis of the research hypotheses

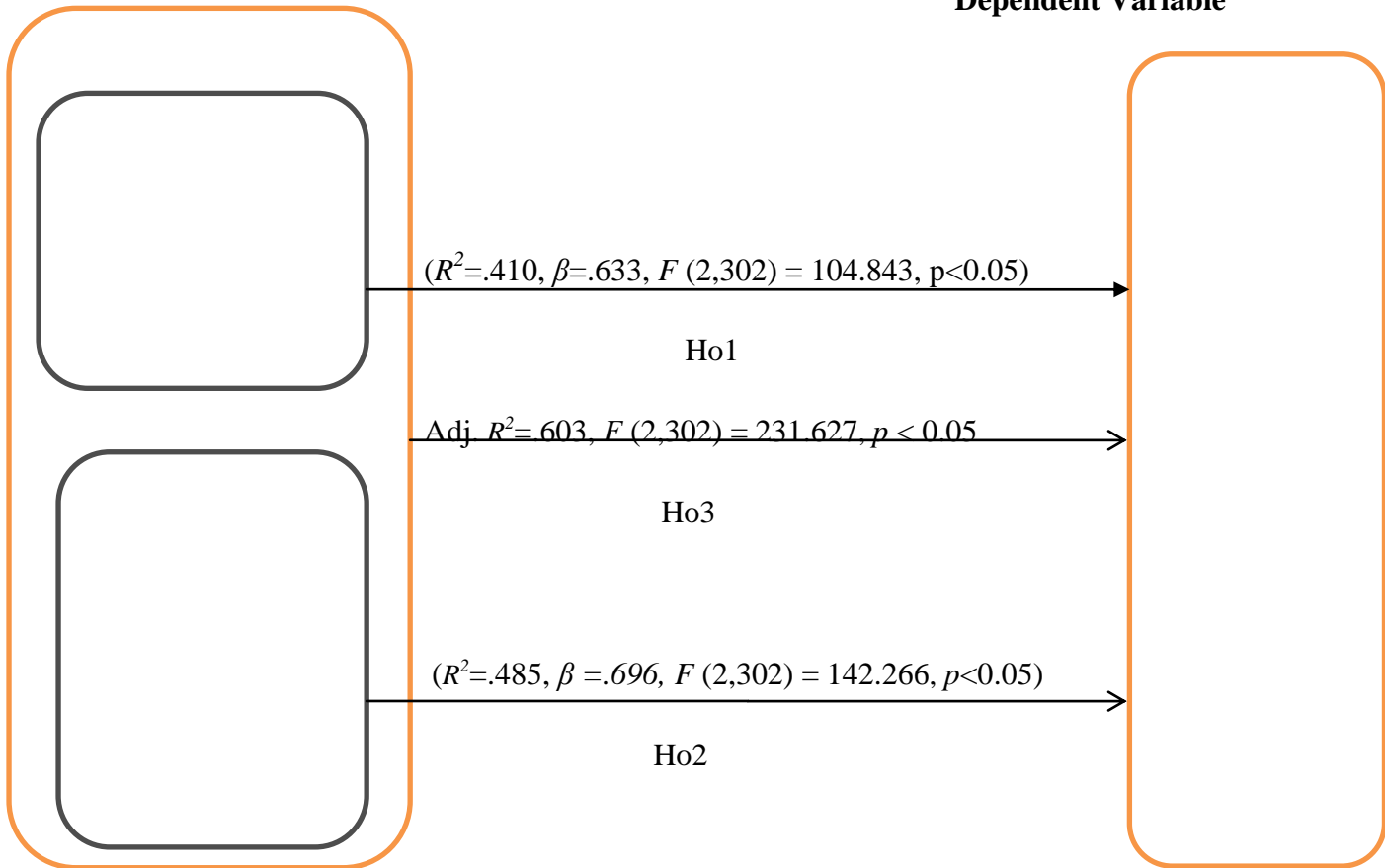
Hypothesis	Findings	Remarks
Hypothesis one: Continuous professional development of librarians in federal university libraries in North-West, Nigeria will not significantly influence their work engagement.	$(R^2=.410, \beta=.633, F (2,302) = 104.843, p<0.05)$ Relatively Education $(\beta=.463, t = 7.506, p < 0.05)$, Training $(\beta=.224, t = 3.628, p < 0.05)$	Ho ₁ rejected
Hypothesis two: Librarians competencies do not significantly influence their work engagement in federal university libraries in North-West, Nigeria	$(R^2=.485, \beta =.696, F (2,302) = 142.266, p<0.05)$. knowledge $\beta =.402, t = 8.301, p < 0.05)$, Skills $\beta=.396, t = 8.169, p < 0.05$.	Ho ₂ rejected
Hypothesis three: Continuous professional development and librarians competencies will not relatively influence their work engagement in federal university libraries in North-West, Nigeria.	Continuous Professional Development $\beta=.393, t = 9.603, p < 0.05$ Competencies $\beta=.512, t = 12.506, p < 0.05$	Ho ₃ rejected
Hypothesis four: Continuous professional development and librarians competencies will not jointly influence their work engagement in federal university libraries in North-West, Nigeria.	Adj. $R^2=.603, F (2,302) = 231.627, p < 0.05$	Ho ₄ rejected

The connections among the dependent and independent variables are shown in the resultant model:

Resultant Model of Work Engagement, Continuous Professional Development and professional competencies.

Independent Variables

Dependent Variable



Resultant model of the influence of continuous professional development, competencies on the work engagement of librarians in federal university libraries in North- west, Nigeria

Explanation of the resultant model

The resultant model reveals that continuous professional development ($R^2=.410, \beta=.633, F(2,302) = 104.843, p<0.05$) had significant influence on work engagement of librarians. Hence, the null hypothesis is rejected and restated: Continuous professional development of librarians in federal university libraries in North-West, Nigeria will significantly influence their work engagement. Therefore the study concluded that Continuous professional development of librarians in federal university libraries in North-West, Nigeria has statistically significant influence on their work engagement.

Similarly, librarians professional competencies: ($R^2=.485$, $\beta =.696$, $F (2,302) = 142.266$, $p<0.05$), have significant influence on their work engagement, and this indicates that librarians knowledge and skill were good predictors of work engagement. Therefore, the null hypothesis is rejected and restated: Librarians competencies do significantly influence their work engagement in federal university libraries in North-West, Nigeria.

Lastly, the resultant model showed that there is a joint significant influence of continuous professional development and professional competencies Adj. $R^2=.603$, $F (2,302) = 231.627$, $p < 0.05$ on work engagement of librarians in federal universities in North-West, Nigeria, and that both variables jointly are responsible for 60.5% of the changes in work engagement of librarians. This implies that continuous professional development and professional competencies were good predictors of work engagement. Therefore, the null hypothesis is rejected and restated. It can be concluded that continuous professional development and librarians professional competencies will jointly influence their work engagement in federal university libraries in North-West, Nigeria.

4.3 Discussion of findings

This study investigated the influence of continuous professional development and professional competencies on work engagement of librarians in university libraries in North-West, Nigeria. This section reports the findings of the study and discusses the findings in accordance with the previous scholarly literature

Research question one looked at the level of work engagement of librarians in federal university libraries in North-West, Nigeria as contained in the specific objectives of the study. The result reveals that the level of work engagement of librarians in federal university libraries in North-West, Nigeria is high. This finding is in line with that of Akinola (2020) who found that the status of librarians work engagement in Nigerian universities was very high. However, it contradicts those of Gallup (2017), Demisse (2019), Ajibola, Mukulu and Simiyu (2019), Alif, Mahrani and (2019) who submitted that the level of librarians work engagement is low.

Similarly, research question two sought to find out the level of continuous professional development of librarians in federal university libraries in North-West, Nigeria. The result revealed that the level of continuous professional development of librarians in federal university libraries in North-West, Nigeria was low. This finding agrees with that of Anene

and Idiedo (2021) who discovered that librarians' participation in professional development workshops using Zoom in Nigeria during Covid 19 pandemic was low. This indicates that the librarians may not be allowed to go for further studies or attend conferences, seminars and workshops to improve upon their existing and learn new knowledge and skills. On the other hand, the finding disagree with the findings of Iwuchuku and Echedon (2020) who studied training and development programmes in academic libraries in Imo State, Nigeria and found that training and continuous professional development was high. Also Posigha and Seimode (2015) reveled that professional development of library professionals in Nigeria was high.

The study also found that professional competencies of librarians in federal university libraries in North-West, Nigeria were high, which implies that the librarians are professionally competent to carry out their professional duties. This finding is supported the findings of Salam, Akawu. and Sadiku (2018) who surveyed the competencies of librarians: A pivotal for real service delivery in university libraries in Niger State, found that the level of librarian's competencies was higher in providing traditional library services than electronic library services. Bamise, Oluwaniyi & Igbeneghu (2019) also found that the cataloguing and classification competencies of librarians in Nigerian academic libraries were high. Oyedokun, Oyewumi, Lawal, and Medinat (2018) surveyed the ICT competence of library staff in selected universities in Kwara State and discovered that, the library personnel studied possess a high level of ICT proficiencies. Also, Okeji, Tralagba and Obi (2019) studied digital literacy skills of librarians working in Nigerian Universities. The outcome revealed that digital literacy skills of the librarians studied was found to be very high and high respectively. This finding contradicts the findings of Ahmed and Rehman (2016) who found that the level of ICT competencies of librarians at public sector universities in Khyber Pakhtunkhwa, Pakistan low.

Research question four sought to find out the constraints of work engagement of librarians in federal university libraries in North-West, Nigeria. The study found on the average that lack of work life balance, inadequate skills set, lack of growth and recognition, opportunity growth needs of the employees active engagement, and managers and workers misunderstanding of work engagement, as well as lack of co-operation and co-ordination from management, and job security, were the issues that constrained the work engagement of the librarians in federal university libraries in North-West, Nigeria.

In the same vein, hypothesis one revealed that continuous professional development had significant influence on work engagement of librarians. Hence, the null hypothesis is rejected and restated: Continuous professional development of librarians in federal university libraries in North-West, Nigeria will significantly influence their work engagement. In support of this finding, Johnson, Masaba Munir, O'Dwyer, Smith, Elawad, and Abdulla, (2020) assessed attitude, knowledge and practice of nurses after a continuing professional development programme in Qatar, the findings reveals that CPD immunisation-training programme was fruitful in enhancing the attitude, understanding and practices of the members. Also Johnson and park, Singh and Shukla (2018) established that there is a correlation between CPD and work engagement. Owaka (2014) survey the perceived effect of continuing professional development on individual performance of professional nurses in ministry of health owned facilities in Nairobi city county, Kenya. The findings of the study disclosed that the nurses studied strongly agreed that CPD has seriously assisted them improve their performance constrains and advance their expertise and proficiencies. Based on the findings of the study it was concluded that, generally the nurses studied agreed strongly that CPD has a positive influence on their job performance. No contrary view was found by the researcher in literature that suggests that there is no correlation between CPD and work engagement of librarians. This may perhaps be due to the dearth of studies on CPD and work engagement of librarians.

Hypothesis two showed that the librarian competencies have significant influence on work engagement of librarians in federal university libraries in North-West, Nigeria. This entails that increase in the level of librarians competencies will increase their level of work engagement. Therefore, the null hypothesis is rejected and restated. This finding agrees with that of Nasrul and Masdupi (2020) who surveyed the effect of competencies and job stress on work engagement staff of the Bukittinggi city, Indonesia. Finding of the study reveals that competencies have an important positive effect on job gratification and job engagement. Thus, the study concluded that competencies have a positive and significant effect on work engagement. This implies that the more enhanced the competencies of personnel the more work engagement is upgraded. Also finding from the study of Haruna and Marthandan (2017) revealed that competencies significantly affect the work engagement of workers. More so, Muhangi (2019) found that there is association between competencies and work engagement of employees. No contrary view was found by the researcher in literature that submits that

there is no correlation between competencies and work engagement of librarians. This may perhaps be due the dearth of studies on competencies and work engagement of librarians.

Hypothesis Three tested the relative influence of continuous professional development and librarians competencies on work engagement of librarians in federal university libraries in North-West, Nigeria. The result revealed that continuous professional development had significant influence on work engagement of librarians and is responsible for 39.3% of the changes in work engagement. Also, librarians competencies was found to have significant influence on work engagement of librarians, and is accountable for 51.2% of the variation in work engagement. Hence, the null hypothesis is rejected and restated: continuous professional development and librarians competencies will relatively influence their work engagement in federal university libraries in North-West, Nigeria. This findings corroborates with that of Nasrul and Masdupi (2020),Muhangi (2019) who found that there is association between competencies and work engagement of employees.

Hypothesis four tested the joint or combined influence of continuous professional development and competencies on work engagement of librarians in federal university libraries in North-West, Nigeria. Both the two independent variables together are responsible for 60.5% of the changes in work engagement of librarians. This implies that continuous professional development and librarians competencies were good predictors of work engagement of librarians in federal university libraries in North-West, Nigeria. Therefore, the null hypothesis is rejected and restated. Even though, no study was found in the literature that investigated the joint or combine influence of these two predictor variables on work engagement, the results from separate cases from the studies conducted by Johnson, Masaba Munir, O'Dwyer, Smith, Elawad, and Abdulla, (2020) and that of Uwaka (2014) have found a strong correlation between CPD and work engagement. While the studies of Nasrul and Masdupi (2020), Haruna and Marthandan (2017) as well as that of Muhangi (2019) found that there is a strong association between competencies and work engagement of employees. These findings corroborated with the outcomes of this study independently. Hence it is quite logical to conclude that if the variables can independently influence the work engagement of librarians in federal university libraries in North-West, Nigeria, then can jointly do better.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter presents the summary, conclusion, recommendations, contributions to knowledge and suggestion for further studies. It was presented under the following:

5.1 Summary

The study examines the influence of continuous professional development and professional competencies on work engagement of librarians in federal universities in North – West, Nigeria. Eight (8) specific objectives were drawn out of which four (4) research questions and four (4) hypotheses guided the study. Literature review covered three (3) sub- units: conceptual review, empirical review, theoretical review and conceptual frame work. Survey research design was applied in carrying out the study. The population for this study comprised 326 librarians in federal universities in North-West, Nigeria. The population was not too large, hence the entire population was used (total enumeration method). A structured questionnaire was the instrument used for data collection; it was validated via content and face validity as well as constructs validity. The Cronbach's alpha reliability score for the instruments were 0.975, 0.775 and 0.868. The data collected were analysed using frequency, percentages, mean and standard deviation. Simple linear regression analysis was used to analysed hypothesis one and two while multiple regressions was used to test the hypothesis three at 0.05 level of significance with the use of Statistical Product and Service Solution (SPSS) version 25.

The major findings of the study are enumerated as follows:

1. The level of work engagement of librarians in federal universities in North – West, Nigeria was high.
2. The level of continuous professional development of librarians in federal universities in North – West, Nigeria was low.
3. The level of competencies of librarians in federal universities in North – West, Nigeria was high.
4. Lack of work life balance constitutes the highest constraints to work engagement while Job security was lowest constraints to the work engagement of librarians in federal universities in North – West, Nigeria.

5. Continuous professional development had significant influence on work engagement of librarians of librarians in federal universities in North – West, Nigeria
6. Librarians’ competencies do significantly influence their work engagement in federal universities in North-West, Nigeria.
7. Continuous professional development and librarians competencies relatively influence the work engagement of librarians in federal universities in North-West, Nigeria.
8. Continuous professional development and librarians competencies jointly influence their work engagement in federal universities in North-West, Nigeria.

5.5 Conclusion

The study investigated the influence of continuous professional development and professional competencies on work engagement of librarians in federal universities in North-West, Nigeria. The study established that continuous professional development and librarians professional competencies are essential elements for higher work engagement of librarians in federal universities in North-West, Nigeria both variables are responsible for the changes in work engagement of librarians. The study jointly indicated a positive and significant influence of the two independent variables (continuous professional development and librarians professional competencies) on work engagement of librarians in federal universities in North-West, Nigeria independently and jointly. Despite the fact that, the level of librarians’ work engagement and professional competencies are high, their level of continuous professional development was low, hence it needs to be improved for higher work engagement. The study therefore concluded that continuous professional development and professional competencies are vital components for higher work engagement of librarians in federal universities in North-West, Nigeria. The study further indicated that there is an association between the empirical, theoretical and statistical evidences among the variables studied. Based on the findings of this study it can be deduced that continuous professional development and professional competencies are the basic factors necessary for high work engagement of librarians in federal universities in North-West, Nigeria which can also lead to performance, creativity and innovations, competitive advantage, productivity and efficiency in organizations.

5.6 Recommendations

In line with the findings of this study, the following recommendations were made:

1. The management of federal universities in collaboration with the federal university libraries in North-West, Nigeria should try to maintain and continue to satisfy the job demands of librarians as well as to provide adequate job resources so as to sustain work engagement of librarians in their domain.
2. The management of federal universities in conjunction with the federal university libraries in North-West, Nigeria should uplift the level of continuous professional development of librarians in federal universities in North-West, Nigeria by sponsoring them to further their education, attend seminars, workshops and conferences regularly. Also, librarians in federal university libraries in North-West, Nigeria should try to actively participate in web-based CPD programmes via webinars, zoom, massive open online courses, social media platforms among others.
3. Librarians in federal universities in North-West, Nigeria should retain their level of professional competencies through on the job training, training the trainer programmes and mentoring.
4. The management of federal university libraries in North-West, Nigeria should educate and enlighten the librarians and managers on work life balance, job security, work engagement, as well as co-operation and co-ordination among workers in form of seminars and workshops.
5. The Nigerian Library Association (NLA) and the Librarian Registration Council of Nigeria should try to organise, enlighten and encourage librarians in federal university libraries in North-West, Nigeria to attend CPD programmes particularly online CPD so as to upgrade the level of their CPD as well as the status of work engagement in federal university libraries in North-West, Nigeria.
6. Competency test should be included among the criteria of testing librarians work engagement in federal university libraries in North-West, Nigeria.
7. The federal ministry of education, Nigeria University commission and other non-governmental agencies should provide more funds to federal university libraries for the improvement of the library system, services, training and development as well as for competency improvement and work engagement.

5.4 Contributions to Knowledge

The study's contributions to knowledge are as follows:

1. The study presented empirical proof on the influence of continuous professional development and professional competencies on work engagement of librarians in federal universities in North-West, Nigeria. This will serve as a base for future studies in the field of Information Resources Management and Human Resources Management.
2. The study has established that theories and models like Human Capital theory, Iceberg competency model and Job Demand and Job Resources (JD – R) model are relevant in understanding the phenomena of continuous professional development, professional competencies and work engagement of librarians in federal universities in North-West, Nigeria.
3. The conceptual model developed for this study has provided a road map for better comprehending of continuous professional development, competencies and work engagement of librarians in universities. The study has meaningfully contributed to knowledge and existing literature in the area of continuous professional development, professional competencies and the degree to which they influence work engagement of librarians in federal universities.
4. The study provided a direction to which continuous professional development and professional competencies can be used to have maximum positive impact on work engagement as well as the kind of professional competencies that are relevant to enhancing work engagement of librarians in federal universities.

5.5 Implications of the Study

1. The implication of the findings of this study is that, there is need for improved CPD programmes for librarians in universities and enhanced application of professional competencies if the required level of work engagement is to be accomplished and maintained.
2. Based on the findings of the study, federal university libraries in North- West, Nigeria would be able to formulate policies to improve the acquisition of competencies by librarians and attending CPD programmes regularly.

3. Going by the inference from this study, it was shown that CPD and professional competencies were significant constructs for predicting and explaining level of work engagement of librarians in federal university libraries in North- West, Nigeria.

4.6 Suggestions for Further Studies

The study has not exhausted all aspects of CPD, competencies and work engagement of librarians in federal universities in North- West, Nigeria. Thus, the researcher suggested for further studies in the following areas:

1. This study can be expanded to cover all other federal university libraries in the remaining geo-political zones of Nigeria.
2. This same study could be replicated in private university libraries in Nigeria.
3. Similar study could be replicated with different variables to verify the level of work engagement of librarians in state university libraries in North- West, Nigeria.
4. Since this study employed quantitative approach, there need for another study using qualitative approach for obtaining an in-depth information about the topic.
5. Also further research using the same variables but with para-professional staff as the population of the study.

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Appendix 1

Informed Consent Form

Dear respondent

My name is Ali Garba (08068520563, karayeunque@gmail.com). I am a PhD student of the Department of Information Resources Management, Babcock University, Ilishan-Remo, Ogun State, Nigeria carrying out a research on “continuous professional development, professional competencies and work engagement among librarians in federal university libraries in North- West, Nigeria.” This research is under the supervision of Dr. Ezinwanyi Madukoma.

The survey method will be used to bring about opinion and perception of librarians in federal university libraries in north- west, Nigeria on how the independent variables influence the dependent variable of this research. I am humbly requesting your participation in this research with the confidence that there are no predictable threats or embarrassments if you agree to participate in the study. The post research benefits will be to the librarians of the universities not only federal universities in north- west, Nigeria but to the entire universities across the world, researchers and the society at large. There will be no consequences and compensation since the questionnaire administration to the respondents will be voluntary also the researcher will make sure that there is no conflict of interest.

The findings will make known the degree of the influence of continuous professional development and professional competencies on work engagement among librarians in federal university libraries in north- west, Nigeria. The study, will contribute to the body of literature which will help other researchers. The research will remain in the domain of academic environment to serve the interest of students and the entire academic community. Any questions you have pertaining this study will be answered by the researcher. Please, note that the decision to participate in this study is voluntarily. You may decline to take part in the study at any time without affecting your rapport with the researcher. You have the right to withdraw completely at any point during the process. If you wish to participate in this study, please sign the form below and return to the researcher.

Thank you

Name.....

Signature of researcher & date.....

Ivoluntarily agree to participate in this study.

Signature/date.....

Name

Signature of witness & date.....

Appendix II

QUESTIONNAIRE ON CONTINUOUS PROFESSIONAL DEVELOPMENT, PROFESSIONAL COMPETENCIES AND WORK ENGAGEMENT OF LIBRARIANS

SECTION A: Demographic Information

1. Name of the University.....
2. Gender:
Male Female
3. Marital status:
Single Married Divorced Widowed
4. Age:
Below 30 31 – 40 41 – 50 51 – 60 Above 60
5. Educational qualification:
BSc/BA MLS/MSc PhD
6. Designation:
Assistant librarian Librarian II Librarian I senior librarian Principal librarian Deputy University librarian University librarian
7. Years of service:
Below 6 years 6 – 10 years 11 – 15 years 16 – 20 years 21 – 25 years
] 26 – 30 years above 30 years

SECTION B: Level of work engagement

Instruction: Please tick the most appropriate of any of the following options as it relate to you; use the following scale 1=Very low, 2=Low, 3=Moderate, 4=High

S/N	Job demands	Very High level	High level	Low level	Very Low level
	Quantitative demands				
1	The degree which the quantity of library work assigned to you has intruded into your private life is				
2	To what magnitude the quantity of library job assigned has not made you meet the job demand target				
3	Relaxation is affected by the quantity of the job carried out in the library to a				
4	To what extent the quantity of library work assigned has lowered your self- esteem				
5	state the extent of responsibilities assigned to you				
	Cognitive demands				
1	To what grade cognitive demands of the job requires the				

	understanding of the job expectation				
2	Describe the degree you think critically to bring solutions to office matters				
3	Rate the extent at which cognitive demands are critical to solution of office problems				
4	The cognitive demands of the job is open to new approaches to improve the job				
5	When some apparatus does not operate well in the library, rate the amount of solution offered				
	Emotional demands				
1	Rate the degree of your self-control when interacting with the library patrons				
2	Describe the extent of supportive feedback given to library patrons				
3	What is the extent of attempt to convince patrons to support library system and services?				
4	Rate the level of politeness when dealing with colleagues and library patrons				
5	Describe the intensity of kindness and gentleness when dealing with patrons				
	Physical demands				
1	The demands for standing to carry out library work is				
2	Rate the demands for sitting down to carry out library work				
3	Rate the demands for carrying books and other information resources from one location to another				
4	What is the extent of demands for standing to carry out my library work				
5	Describe the extent of demands for operating computer in carrying out library job				
	Job Resources				
	Physical job resources				
1	Describe the availability of tools, facilities and equipment used to				

	carryout library work				
2	Rate the degree of suitability of the tools, facilities and equipment used to carryout library job				
3	What is the extent of maintaining these tools, equipment and facilities				
4	To what extent is the lightening and office accommodation				
5	The extent of silence and ventilation in my working environment is				
	Cognitive Job resources				
1	Rate the degree of consulting manuals , handbooks and other resources for information about library work				
2.	Rate the level of use of the information retrieved from manual , handbooks and other resources for library job				
3	Describe the amount of assistance received from colleagues in relation to library work				
4	I learn more about my job from my supervisor in office to a				
5	Rate the extent of navigating online to find resources for library patrons				
	Emotional Job resources				
1	My degree of interaction with difficult patrons at work is				
2	Rate the degree at which library work put you in emotional upsetting conditions				
3	The extent of control of my emotions when dealing with my colleagues in working place is				
4	Describe the amount of control of emotions when dealing with library patrons				
5	To what extent do you contact co-workers when in trouble with library work				

SECTION C: Level of Continuous Professional Development

Please tick the appropriate option for continuous professional development

Very high Level = 4, High Level = 3, Low Level = 2, Very low Level = 1

	Education	Very high	High	Low	Very Low
1	State the level at which your organization release you for work study				
2	The extent to which my organisation sponsored staff to further education is				
3	The available grants to further our education in our organisation is				
4	The extent i further my education through the distance learning system is				
5	I further my education via the online platforms to a				
	Training	Very high	High	Low	Very Low
1	My level of attending webinars and other online trainings is				
2	The extent i attended seminars, conferences and workshops is				
3	The amount of attending in-house training with external resource persons is				
4	The amount of training i receive informally from my supervisors and colleagues in office is				
5	The magnitude at which i attended on the job training programme is				

SECTION D: Level of professional competencies

Please tick the appropriate for option professional competencies

Very high Level = 4, High Level = 3, Low Level = 2, Very low Level = 1

	Knowledge	Very high	High	Low	Very Low
1	My understanding of how to evaluate different information sources is				
2	My expertise to process various information resources in the library is				
3	My ability to select various information resources into the library is				
4	My awareness of various information resources in various formats is				
5	My understanding of how to motivate workers toward the attainment of organisational aims and objectives is				
6	My familiarity with the sophisticated and emerging technologies used in service delivery in our libraries is				
7	The extent to which I can retrieve relevant				

	information for the patrons is				
8	The extent to which I can determine the information needs of our library patrons is				
9	My expertise to disseminate relevant information in different format to the patrons is				
10	My capacity to conduct various researches to find solution to many existing problems in my library is				
	Skills	Very high	High	Low	Very Low
1	My capability to communicate fluently is				
2	My ability to communicate politely is				
3	My ability to handle digital information resources is				
4	My capacity to use and apply matters of information privacy and security in electronic environment is				
5	The extent to which I can apply copyright law is				
6	My ability to disseminate information resources ethically is				
7	My capability to organise information resources ethically is				
8	The extent to which I can use sophisticated and emerging technologies in service delivery in our libraries is				
9	My capacity to manipulate multimedia information resources is				
10.	My proficiency to handled plagiarism is				

SECTION E: Constraints of work engagement among librarians in federal university libraries in North- West Nigeria. Please tick the option you consider appropriate for Constraints of work engagement. 4 = Strongly Agree, 3 = Agree, 2 = Disagree, 1 = Strongly disagree

S/NO.	Constraints of work engagement	Strongly Agree	Agree	Disagree	Strongly disagree
1	Lack of work life balance				
2	Lack of growth and recognition				
3	Lack of co-operation and co-ordination from management				
4	Inadequate skills set				
5	Opportunity growth needs of the employees active engagement.				
6	Managers and workers misunderstanding of work engagement				
7	Job security				

Thank you

Appendix III

Summary of reliability analysis

Variables	No. of Items	Cronbach's Alpha
Work engagement	35	0.975
Continuous professional development	10	0.775
Professional Competencies	20	0.868

For Appendix

Work engagement

Reliability Statistics

Cronbach's Alpha	N of Items
.975	35

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
QD1	88.10	487.211	.840	.974
QD2	88.50	487.389	.872	.974
QD3	88.50	501.833	.330	.976
QD4	88.50	482.500	.742	.974
QD5	88.30	487.789	.733	.974
CD1	88.70	502.456	.243	.977
CD2	88.70	488.678	.609	.975
CD3	88.60	476.267	.803	.974
CD4	88.60	480.933	.905	.974
CD5	88.70	478.456	.862	.974
ED1	88.50	479.389	.940	.973
ED2	88.60	477.378	.872	.974
ED3	88.50	474.500	.937	.973
ED4	88.60	480.933	.905	.974

ED5	88.60	480.933	.905	.974
PD1	88.50	475.833	.904	.973
PD2	87.80	502.400	.342	.976
PD3	88.40	486.044	.927	.974
PD4	88.10	513.211	.061	.976
PD5	88.10	518.767	-.125	.977
PJR1	88.40	481.156	.899	.974
PJR2	88.20	478.178	.898	.973
PJR3	88.30	502.900	.312	.976
PJR4	88.30	470.233	.952	.973
PJR5	88.40	472.933	.982	.973
CJR1	88.40	472.933	.982	.973
CJR2	88.20	494.622	.566	.975
CJR3	88.40	486.044	.927	.974
CJR4	88.40	486.044	.927	.974
CJR5	88.50	494.722	.450	.976
EJR1	88.60	475.822	.813	.974
EJR2	88.50	479.389	.940	.973
EJR3	88.40	472.933	.982	.973
EJR4	88.30	479.567	.967	.973
EJR5	87.80	515.511	-.030	.978

Continuous professional development

Reliability Statistics

Cronbach's Alpha	N of Items
.775	10

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
EDUCATIO N1	27.50	13.500	.550	.740
EDUCATIO N2	28.20	11.752	.783	.697
EDUCATIO N3	27.60	14.110	.489	.749
EDUCATIO N4	27.80	12.579	.828	.699
EDUCATIO N5	27.20	15.269	.361	.765
TRAINING1	27.50	16.603	.162	.784
TRAINING2	27.20	14.648	.489	.750
TRAINING3	27.00	16.138	.310	.770
TRAINING4	27.30	15.941	.395	.764
TRAINING5	28.10	15.817	.125	.808

Professional Competencies

Reliability Statistics

Cronbach's Alpha	N of Items
.868	20

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
KNOWLEDG E1	52.70	67.789	.525	.860
KNOWLEDG E2	53.10	64.322	.872	.849
KNOWLEDG E3	53.10	66.100	.571	.858
KNOWLEDG E4	53.10	61.878	.778	.848
KNOWLEDG E5	52.90	62.989	.845	.848
KNOWLEDG E6	53.30	63.344	.608	.856
KNOWLEDG E7	53.30	70.011	.239	.872
KNOWLEDG E8	53.00	73.111	.062	.877
KNOWLEDG E9	53.70	71.344	.226	.870
KNOWLEDG E10	53.30	62.678	.650	.854
SKILLS1	52.70	67.789	.525	.860
SKILLS2	53.10	64.322	.872	.849
SKILLS3	53.10	66.100	.571	.858
SKILLS4	53.10	61.878	.778	.848
SKILLS5	52.90	62.989	.845	.848
SKILLS6	51.80	77.067	-.342	.879
SKILLS7	52.00	71.333	.245	.869
SKILLS8	52.00	75.333	-.099	.876
SKILLS9	52.20	72.178	.172	.871
SKILLS10	52.00	75.333	-.092	.879

Summary of reliability analysis

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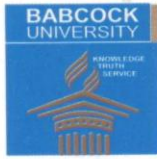
Professional Competencies

Reliability Statistics

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BABCOCK UNIVERSITY HEALTH RESEARCH ETHICS COMMITTEE

Our Ref. NHREC/24/01/2020 Your Ref. BUHREC821/21b Date: February 24, 2022

NAME OF PRINCIPAL INVESTIGATOR: ALI GARBA

**TITLE OF STUDY: CONTINUOUS PROFESSIONAL DEVELOPMENT,
COMPETENCIES AND WORK ENGAGEMENT OF LIBRARIANS
IN FEDERAL UNIVERSITY LIBRARIES IN NORTH-WEST,
NIGERIA.**

RESEARCH LOCATION: NORTH-WEST, NIGERIA.

NOTIFICATION FOR ETHICAL APPROVAL

Babcock University Health Research Ethics Committee has approved your research proposal and other related materials after the necessary reviews and corrections.

The National code for Health Research Ethics requires that you comply with all institutional guidelines, rules and regulations. All forms and questionnaire must carry the assigned BUHREC number. No changes are permitted in the research without prior approval by the Committee.

Please, note that the Committee will monitor the research study. All data collection must be completed within twelve calendar months (One year), from the date stated on this approval.

You are expected to give a progress report of the investigation and submit a final copy of the research to the Committee.

This approval is with effect from October 27, 2021.

Thank you.



Professor K. O. Ogunwenmo
Chairman, Babcock University Health Research Ethics Committee
09133507122

Babcock University Health Research Ethics Committee (BUHREC)

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