

# NEAR EAST UNIVERSITY INSTITUTE OF GRADUATE STUDIES DEPARTMENT OF INNOVATION AND KNOWLEDGE MANAGEMENT

## RELATIONSHIP BETWEEN LIBRARIAN'S HUMAN CAPITAL AND LIBRARIAN'S WORK PERFORMANCE: A MEDIATING EFFECT OF INNOVATION CAPABILITY IN SOUTHERN AFRICA EVALUATION OF OPINIONS OF TEACHERS

Ph.D. THESIS

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Nicosia

May, 2022

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### Declaration

I hereby declare that all information, documents, analysis, and results in this thesis have been collected and presented according to the academic rules and ethical guidelines of the Institute of Graduate Studies, Near East University. I also declare that as required by these rules and conduct, I have fully cited and referenced information and data that are not original to this study.

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Tinotenda Chiganze

## Abstract The Relationship between Librarian's Human Capital and Librarian's Work Performance: A Mediating Effect of Innovation Capability in Southern Africa

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Human capital is considered crucial for the sustainability and success of libraries in this era of globalization. The presented study investigated the effect of human capital on innovation capability and employee job performance in academic libraries. It also explored the effect of innovation capability on employee job performance in academic libraries. Furthermore, the study examined the mediating effect of innovation capability on the relationship between human capital and employee job performance. This study implemented a survey research design. Structured questionnaires were employed to collect the data using the convenience sampling technique. The population of the study included 387 librarians and library assistants from academic libraries in Southern Africa Region which incorporates three countries, namely Namibia, South Africa, and Zimbabwe. Data were analyzed through the multivariate technique facilitated by the structural equation analysis. The results indicated that human capital had a significant and positive effect on innovation capability and employee job performance in academic libraries. Innovation capability also had a significant and positive effect on employee job performance. Further, the findings showed that Innovation capability partially mediates the relationship between human capital and employee job performance. The dimensional level analysis reveals that human capital has a significant and positive effect on all dimensions of innovation capability and employee job performance. Moreover, innovation capability indicates a significant and positive effect on all dimensions of employee job performance. The study illustrates essential implications to library

managers on the significance of human capital and, therefore, recommends that library managers should place emphasis on the part which human capital plays and invest in the most viable elements of human capital, which can develop innovation capabilities and in turn, play a substantial part in boosting employees' job performance.

*Key Words:* Keywords, human capital, innovation capability, employee job performance, librarians, academic libraries, Southern Africa

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## List of Abbreviations

AP:	Adaptive Performance
CP:	Contextual Performance
EJP:	Employee Job Performance
ES:	Experience and Skills
HC:	Human Capital
НСТ:	Human Capital Theory
HCMS:	Human Capital Measurement Scale
IC:	Innovation Capability
IWPQ:	Individual Work Performance Questionnaire
LM:	Leadership and Motivation
LIS:	Library Information Science
MI:	Marketing Innovation
OI:	Organizational Innovation
<b>OPAC:</b>	Online Public Access Catalogue
RFID:	Radio Frequency Identification
<b>RBV:</b>	Resource-Based View
STI:	Service and Technological Innovation
SEM:	Structural Equation Modelling
SMS:	Short Message Services
SNS:	Social Network Sites
SPSS:	Statistical Package for Social Sciences
TE:	Training and Education
TP:	Task Performance

## CHAPTER I Introduction

This chapter includes the background of the study, problems, aims, importance, limitations, and related descriptions of the research.

#### **1.1 Background of the Study**

Intellectual capital is the utmost significant knowledge asset an organization can own in the 21<sup>st</sup> knowledge-based economy, therefore organizations must capitalize, manage and cultivate their employees' intellectual capital for them to succeed (Bedford, Donley & Lensenmayer, 2014). Intellectual capital consists of "knowledge, applied experiences, organizational technology, customer relationships, and professional skills that can be used to boost the growth of an organization and hence make an organization competitive in the marketplace" (Edvinsson & Malone, 1997).

According to the library context, intellectual capital is described as nonfinancial resources controlled by a library that enables the library to improve the efficiency, effectiveness, quality, and sustainability of library operations and information services in the long term. These assets include the capabilities of human resources, structured representations of organizational competencies (e.g. knowledge repositories, information systems, and best practices in information work), and knowledge about library stakeholders (for example, their users, parent organizations, and other stakeholders) (Corall & Sriborisutsakul, 2010).

Intellectual capital is classified into three components which incorporate human capital, structural capital, and relational capital (Stewart, 1997). Human capital involves an employee's education, training, professional skills, expertise, adaptability skills, ability to work in a group, and commitment to the library's goals and strategies (Corrall & Sriborisutsakul, 2010). Also, human capital could include the library employee's capacity to accomplish the library goals by being able to induct new library users and retain them over time (Kostagiolas & Tsoubrakakou, 2014).

Structural capital is the organizational component that assists the human capital to perform (Bollen et al., 2005; Chen et al., 2004). Similarly, It contains components such as infrastructure, processes, technology, databases, customs, and principles of a library organization that enables human resources to execute their work, for instance, the organization of the library collection and stock (Kostagiolas, 2013). Finally, relational capital is connected to knowledge procured from the library's interaction with its neighboring parties such as its relations with library users, suppliers, publishers, partners, etc. (Kostagiolas & Tsoubrakakou, 2014; Wendra, et al., 2019).

The central focus of this study is on human capital. The study focused mainly on human capital because it is the most important intangible or knowledge asset among the other two assets since it supports an organization's valuegenerating practices (Mushi, 2010). This notion is supported by Drucker (1999) who proposed that the "most valuable asset of a 21<sup>st</sup>-century organization will be its human resources and how effectively and efficiently they perform their jobs.

The above view is also supported by Kostagiolas (2012) who opined that human capital or knowledge capital has become a crucial element for libraries particularly public libraries, fostering innovation and genuine improvements in library operations and services. Correspondingly, Idiegbeyan-ose, Opeke, Aregbesola, Owolabi and Eyiolorunshe (2019) stated that organizations, as well as libraries and information centers, prevail as a result of the human capital performing responsibilities and tasks, which is why human capital is so fundamental to organizational success.

Human capital is mainly a method that involves an employee's education, training and enterprises brought up by the organization to develop the employee's knowledge, expertise, and capabilities. This results in employees performing well in their jobs and contributing to the growth of the organization (Alnachef & Alhajjar, 2017). Also, human capital could include a library

employee's capability to achieve the objectives of the library by inducing and maintaining new library users over time (Kostagiolas & Tsoubrakakou, 2014).

Human capital is critical for employee job performance in libraries, primarily because employees are the ones who perform duties, and their performance warrants organizations to attain preferred goals (Verma & Singh, 2019). Furthermore, employee job performance is defined as the execution of mandatory responsibilities or activities based on the employees' expertise. These mandatory duties are tailored toward the achievements of the objectives of an organization (Saka & Salman, 2014). In other words, Amusa, Iyoro and Olabisi (2013) reiterated that the job performance of library personnel' is an aspect of their job manners that is relevant to the success of the library.

Human capital is also critical in the development of innovation capabilities among employees (Yen, 2013). Correspondingly, human capital is seen as a stimulus that increases the capacity of employees to innovate in an organization (Waseem, Loo-See, Adeel & Riaz, 2018). Generally, innovation capability can be characterized as the ability to generate new resources and produce products and services more effectively and satisfactorily than competitors (Jeng & Pak, 2016). Additionally, innovation capability is described as an organization's ability to propose and implement new strategies for the market (Nisula & Kianto, 2013) thus leading to enhanced service delivery and improved employee performance (Sadikoglu & Zehir, 2010).

Despite the value of human capital and its crucial role on employee performance, fewer studies have been carried out to examine the impact of human capital on employee job performance in a library context (Asonitis & Kostagiolas, 2010; Lo & Stark, 2020; White, 2007). There is a research gap in exploring the effects of human capital on employee job performance in developing countries (Dhar, Mutalib & Sobhani, 2019).

Furthermore, there is a profound association between human capital and innovation capability, but there is a lack of literature available on how the human capital of a library contributes to innovation (Sa'ari, Idrus & Jaafar 2016). Hence, the main aim of this study is to evaluate how human capital affects innovation capability and employee job performance in academic libraries in Namibia, South Africa, and Zimbabwe.

#### **1.2 Statement of the Problem**

Numerous previous researchers have distinguished the significance of evaluating intangible assets and performance, mainly human capital, yet an accustomed set of measurement policies designed for libraries and library administrators is still lacking (White, 2007). Thus the present study aims to have a detailed assessment of human capital and its impact on employee performance in academic libraries in Southern Africa.

Also, the impact of human capital on innovation has been examined sparingly in developing nations, particularly in Africa, with the majority of credible research undertaken in developed countries. As a result of the scarcity of research on this topic, this study intends to fill the void by examining the impact of human capital on innovation capabilities in academic libraries in Southern Africa, specifically in Namibia, South Africa, and Zimbabwe (Bekana, 2019).

Moreover, as mentioned by Mabenge, Ngorora-Madzimure and Makanyeza (2020) the relationship between innovation capability and employee performance is not fully exploited by organizations in developing countries, particularly in Southern Africa, most supporting evidence is derived from studies from developed countries. As a result, they advocated for more research into these associations. Based on this context, this research was conducted to examine the relationships in Southern Africa, particularly, in Namibia, South Africa, and Zimbabwe, particularly in libraries, where research is scarce in this area.

Furthermore, limited attention has been given by academic researchers to examining the mediating effect of innovation capability on human capital and employee performance and there is an insufficient theoretical direction or empirical evidence provided by the related literature (Yen, 2013). Thus the current research aims at bringing out the importance of human capital in bridging the gap in library personnel in terms of their innovativeness and work performance in Southern Africa.

### 1.3 Purpose and Objectives of the Study

Primarily, the current study aims to investigate if innovation capability has a mediating effect on the relationship between human capital and employee job performance in academic libraries in Southern Africa, particularly from Namibia, South Africa, and Zimbabwe. The research objectives are identified in detail below:

- To Identify the level of human capital in academic libraries in Namibia, South Africa, and Zimbabwe.
- To examine the level of employee performance in academic libraries in Namibia, South Africa, and Zimbabwe.
- To determine the degree of human capital in academic libraries in Namibia, South Africa, and Zimbabwe.
- To investigate the relationship between human capital and employee job performance in academic libraries in Namibia, South Africa, and Zimbabwe.
- To examine the relationship between human capital and innovation capability in academic libraries in Namibia, South Africa, and Zimbabwe.
- To determine the relationship between innovation capability and employee job performance in academic libraries in Namibia, South Africa, and Zimbabwe.
- To investigate the relationship between human capital, innovation capability, and employee job performance in academic libraries in Namibia, South Africa, and Zimbabwe.
- To examine the mediating effect of innovation capability on the relationship between human capital and employee job performance in academic libraries in Namibia, South Africa, and Zimbabwe.

### **1.4 Research Questions**

The following research questions were created based on the purpose of the study:

- What is the level of human capital?
- What is the level of employee job performance?
- What is the degree of innovation capability?
- What is the relationship between human capital and employee job performance?
- What is the relationship between human capital and innovation capability?
- What is the relationship between innovation capability and employee job performance?
- What are the relationships between human capital, innovation capability, and employee job performance?
- Does innovation capability mediate the relationship between human capital and employee job performance

### **1.5 Significance of the Study**

The study is important because it will provide libraries and other industries an awareness of the significance of investing in human capital which will assist in enhancing the work performance of employees. Also, libraries will be driven to frequently assess the performance of trained and educated librarians to recognize gaps in their abilities which will enable the library to design relevant human capital programs related to training, education, skills, leadership, and motivation to secure greater employee performance (Samad, 2013).

The study is also crucial because library administrators or management will know that to come up with new ideas or develop new products or services and therefore increase employee performance it is vital to constantly upgrade employees' knowledge and skills through human capital investment which will ultimately enhance their performance. For instance, according to Mamvoto and Mutasa (2014) in a study of academic libraries in Zimbabwe, it was shown that the University of Zimbabwe academic library is amongst the few academic libraries in Zimbabwe with the most successful Institutional Repository (IR)

and has a working IR policy in place since their personnel was the first to receive IR training. Therefore, this study will encourage academic libraries and other libraries in southern Africa, that have shown less interest in upgrading their employees to follow suit by investing in human capital which is deemed to increase librarians' innovation capacity and as a result enhance their performance in the long term.

Additionally, the present research is projected to significantly contribute to and expand the literature available on the relationship between human capital, innovation capability, and employee performance in academic libraries in Southern Africa, particularly in Namibia, South Africa, and Zimbabwe, where less research has been carried out on the topic. It is projected that this research will provide meaningful information to practitioners and scholars regarding the role of human capital on the relationship between innovation capability and employee performance through theoretical and empirical findings, described in the following chapters. From a theoretical standpoint, the researchers' assertions were founded on the human capital theory and the resource-based view. From an empirical standpoint, the researcher relied on structural equation modeling (SEM) to evaluate not just the casual relationship, but also the dimensional associations. The multivariate statistical analyses and SEM used in this study will provide robust findings and conclusions on the statistical relationship between human capital, innovation capability, and employee job performance, as well as set up fresh doors for future scholars interested in these constructs.

### **1.6 Limitations of the Study**

The present research took a quantitative method because it is best for assessing the causal influence and putting hypotheses to the test. The scope of the study was limited to academic libraries in Southern Africa, particularly from Namibia, South Africa, and Zimbabwe. The empirical data was collected from librarians, assistant librarians, senior librarians, principal librarians, deputy librarians, and library assistants from academic libraries using online selfadministered questionnaires. These groups were targeted because of their knowledge, expertise, experiences, duties, and interest in the problem of the study.

#### 1.7 Definition of Key Terms

#### **1.7.1 Human Capital**

According to Bontis and Fitz-Enz (2002), human capital refers to an organization's employees' cumulative knowledge, skills, experience, education, and wisdom. Human capital is also seen as a high-priced organizational asset (Perera & Thrikawala, 2012). Correspondingly, human capital, according to Dae-Bong (2007), is "an assemblage of elements that determine the value of a worker's marginal output, such as education, experience, training, intelligence, passion, work ethic, dependability, and ingenuity."

### **1.7.2 Innovation Capability**

The development, acceptance, and novel and useful ideas, techniques, products, or services have been defined as innovation. Furthermore, innovation is defined as a process that comprises turning a novel idea into a viable product or service to achieve a competitive advantage in the marketplace (Yang, 2012). Innovation capability entails the creation and implementation of novel management practices, processes, or procedures that assist a company in achieving its objectives (Mendoza-Silva, 2020).

#### **1.7.3 Employee Performance**

Employee performance refers to employees who complete their jobs and goals according to the organization's standards, and they are evaluated based on their performance against those standards (Bhat, 2013). Employee performance is a performance indicator used in many firms to assess employees' talents and efficiency (Ahmad & Manzoor, 2017). Motowidlo (2003) defined job performance as the degree to which day-to-day tasks are completed.

#### **CHAPTER II**

### **Literature Review**

Research-related conceptual definitions, descriptions, and information related to the subject that already exists in the literature are given in this chapter.

#### 2.1 Theoretical Framework and Hypotheses

As indicated in Figure 1, the conceptual framework was derived from the principles of the human capital theory, resource-based view, and literature review. A key principle of the human capital theory is that the acquisition of human capital contributes to enhanced employee effectiveness, and therefore increases employee performance in an organization (Bodovski, Chykina & Khavenson, 2019). Human capital is viewed as a valuable resource in the context of performance by the human capital theory, similar to how other resources in the organizations are viewed (Sarto et al., 2019). Furthermore, the theory maintains that human capital in the form of employee knowledge attained through training and education boosts employees' cognitive abilities, allowing them to execute their work more successfully and efficiently (Becker, 1994; Davidsson & Honig, 2003; Hsu & Wang, 2012; Schultz, 1961).

On the other hand, the basic premise of the resource-based view is that an organization's resources are the most important factors in achieving a long-term competitive advantage and attaining better performance in an organization (Wernerfelt, 1984). Human capital resources, according to the resource-based view, are notable, incomparable, vital, and diverse resources that can contribute to a competitive advantage for an organization, resulting in performance improvements (Barney & Wright, 1998; Seclen-Luna et al., 2021).

Furthermore, the resource-based view contends that an organization's ability to innovate is determined by its human capital resources (Barney, 1991). Moreover, the resource-based view indicates that organizations with great innovation capabilities can lead to greater performance due to the propensity that innovative capabilities cannot be precisely imitated (Dhewanto et al., 2012). Therefore, this study uses the human capital theory and the resourcebased view to illustrate the relationship between human capital, innovation capability, and employee performance, as well as the relationship between innovation capability and employee performance.

Moreover, according to the literature review, innovation capability substantially mediates the relationship between human capital and performance. Human capital works as a catalyst that enhances innovation in an organization which will ultimately result in improved performance (Mc Dowel, Peake, Coder & Harris, 2018; Waseem et al., 2018). Furthermore, According to previous studies, human capital influences innovation capability which in turn influences the work performance of employees. Building human capital facilitates innovative capabilities which lead to the creation of new products and services. By introducing new products or services, organizations increase the market penetration rate, which eventually influences organizational performance (Yen, 2013). Consequently, four principal research hypotheses were established in this study to objectively determine the association between human capital, innovation capability, and employee job performance.

For the purpose of the current study, the following principal proposed hypotheses are proposed:

- **H1:** Human capital has a significant and positive effect on employee job performance.
- **H2:** Human capital has a significant and positive effect on innovation capability.
- H3: Innovation capability has a significant and positive effect on employee job performance.

**H4:** Innovation capability significantly and positively mediates the relationship between human capital and employee job performance

Furthermore, given the difficultness and dynamics of the work environment, as well as the breadth of these concepts, the author decided to look into the dimension-level relationship between the constructs, examining how human capital influences different dimensions of employee performance and how innovation capability influences different dimensions of employee performance. As a result, the following sub-hypotheses have been proposed:

H1a: Human capital has a significant and positive effect on task performance.

- **H1b:** Human capital has a significant and positive effect on contextual performance.
- **H1c:** Human capital has a significant and positive effect on adaptive performance.
- **H2a:** Human capital has a significant and positive effect on service and technological innovation.
- **H2b:** Human capital has a significant and positive effect on organizational innovation.
- **H2c:** Human capital has a significant and positive effect on marketing innovation.
- **H3a:** Innovation capability has a significant and positive effect on task performance.
- **H3b:** Innovation capability has a significant and positive effect on contextual performance.
- **H3c:** Innovation capability has a significant and positive effect on adaptive performance.

**Conceptual Framework** 

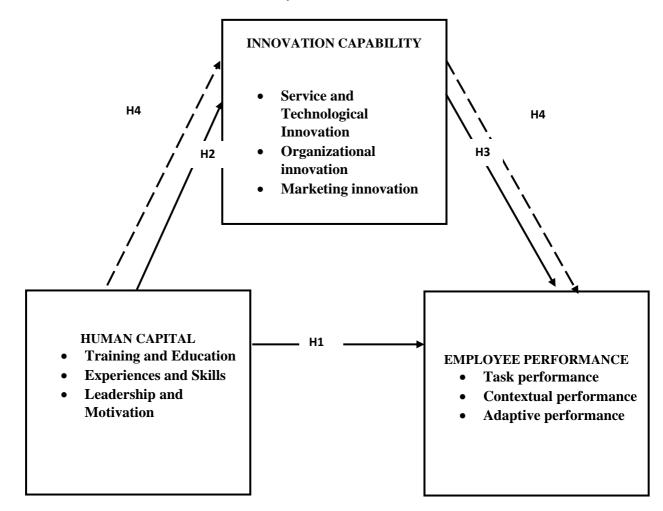


Figure 1: Conceptual Framework Source: author

### **2.2 Related Research**

### 2.2.1 Concept of Human Capital

The concept of human capital stems from the 1960s when the economists Schultz (1961) and Becker (1962) initiated the formalization of the "human capital theory" (HCT) to show how individuals' investment in themselves was similar to organizations' investments in physical capital. According to Schultz (1961), human capital is depicted as a set of knowledge, skills, and abilities that an individual has and uses daily. Becker (1962) asserted that human capital refers to "investment in education, training, skills, health, and other virtues that can not be detached from the individual.

Human capital is associated with employees' competencies, experiences, and behaviors (Diniz, 2015; Edvinsson & Malone, 1997). Human capital is referred to as the "know-how, competencies and personal characteristics of personnel in an organization" (Johansen, 2014). Qian and Huang (2017) described human capital as the "employees' education, know-how, and their relations with other employees in the organization."

Robbins and Coulter (2015) postulated that human capital is an employee's know-how, abilities, and experiences. In addition, employees' personalities, sharing of knowledge, education, training, and their experiences or tenure are vital in the organization for human capital development. Moreover, human capital is outlined as employees' professional skills, management capability, adventurousness, and ability to tackle problems (Salehi, Enayati & Javadi, 2014).

Human capital is regarded as employees' beliefs, principles, approaches, and aptitudes which incorporate coming up with new ideas, expertise, and commitment to accomplish numerous tasks in the organization (Singh & Narwal, 2015). Likewise, human capital indicates employees' absolute astuteness, ideals, tactics, abilities, knowledge, expertise, experiences, competencies, education, experiences, academic qualifications, educational levels, dedication, determination, personal associations and interactions with others, creativeness, adaptability, and learning capacity (Inkinen, 2015).

Also, human capital signifies employees' ability to learn, ability to cooperate and work with others in a group, ability to come up with novel ideas to improve products and services, adaptability, and dedication to perform any task in the organization (Baron & Armstrong, 2007). On a similar note, human Capital is described as the knowledge, intelligence, expertise, insight, skills, inventiveness, and ability of employees to comprehend and accomplish their organizational tasks and goals (Mushi, 2010).

Agwu and Luke (2014) defines human capital as the overall stock of knowledge, skills, competencies, and creative abilities that a population

possesses. He noted that organizations play a pronounced role in placing the employees to carry out their responsibilities commendably through an unceasing improvement of human capital. Then again, Ajeemsha and Madhusudhan (2014) see human capital as an assemblage of resources, all the understanding, aptitudes, talents, capabilities, experience, cleverness, training, judgment, and intelligence of individuals in an organization.

Pratheepa and Jayaraman (2011) defined human capital as the human feature in the organization; the mixture of astuteness, skills, and proficiency that gives the organization its distinctive character. They added that the human essentials of the organization are those that are skillful in learning, shifting, revolutionizing, and providing the imaginative drive, which if appropriately encouraged can guarantee the long-run persistence of the organization.

According to Chinwe (2013), human capital is the procedures that communicate to training, education, and other professional creativities to upturn the heights of information, expertise, capabilities, standards, and societal possessions of an employee, which will lead to the employee's job satisfaction and performance. Becker (2011) regarded human capital as investment in education, training, skills, health, and other values that cannot be detached from the individual.

Ikramul (2012) sees human capital as the distinctive capabilities, performances, and individual dynamism possessed by people and these fundamentals make up the human capital, which they bring to the workplace. Corroborating this, Kanade and Deshmukh (2013) added that human capital is the awareness and expertise, that individuals generate, preserve and use. Mirza and Mahmood (2013) see human capital as the understanding, assistance, competencies, abilities, and other attributes embodied in individuals that facilitate the creation of personal, social, and economic wellbeing.

### 2.2.1.1 Dimensions of Human Capital

**2.2.1.1.1 Training.** According to Adom and Asare-Yeboa (2016), the importance of training in the development of human capital in any organization

has long been recognized. Training is defined as a learning activity that is directed toward the acquisition of specific knowledge and skills for an occupation or task (Madukoma, Akpa & Okafor, 2014). Similarly, De Cenzo and Robbins (1996) posit that training is a learning experience, which seeks a relatively permanent change in an individual's skills, knowledge, attitudes, or social behavior. Adom and Asare-Yeboa (2016) hypothesized that training is a method of enhancing human capital capabilities to improve company performance in any commercial endeavor.

Training can be understood as the process of teaching employees new skills that are essential to perform their jobs (Olaniyan & Ojo, 2008). Training can also be described as a systematic development of knowledge, skills, and attitudes required by employees to perform adequately on a given task or job (Al-Ajlouni, Athamneh, & Jaradat, 2010). According to Ukachi and Onuoha (2013), citing Eze (2012), training is an open or secluded education program openly relevant to work circumstances. They added that the minute there are gaps in work productivity and anticipated efficiency, it explains that the employees involved desires extra and improved abilities and understanding to be gained through training.

Training, however, is the short period procedure exploiting a methodical and prearranged practice by which non-managerial employees absorb mechanical knowledge and abilities for a convincing purpose. Thus, as soon as employees are trained, they develop skills enhanced and improve development in their skills that will improve their efficiency and performance and successively complete their tasks on time (Solomom, 2013). Yalokwu (2008) emphasized that training is essential for all employees it improves their jobrelated knowledge, skills, and performance. Training is classified into different methods such as on-the-job training, off-the-job training, stimulation methods, and information presentation methods. All these types of training help to equip staff as well as motivate them to perform well on their jobs.

Owusu-ansah and Gogo (2014) opined that the employees have numerous potentials connected with training as well as full career expansion opportunities. Thus, training could be a motivating factor for workforces to improve dedication to organizational performance. Some of the importance of training according to Sonawane (2016) is essential to face the authenticities at work on a day-to-day basis.

Park and Park (2019) added that training improves the employees to be healthily prepared for encounters or else it could overwhelm them. Ogunmodede and Mafelu (2012) submitted that training is a deliberate and endless program aimed at positioning employees to solve problems in the workplace. However, according to Ajeemsha and Madhusudhan (2014), library staff understand the importance of continual training since it aids them in developing interpersonal skills, leadership skills, and professional abilities.

Training is an important aspect of vocational or professional development, and it is quickly becoming a global and pervasive phenomenon in every establishment, where its absence means death for the institution and its presence determines the success of any organization. Furthermore, the author emphasizes the incalculable and unquantifiable value of training in human resource development, particularly in libraries and information systems (Ajidahun, 2007).

While Ghuloum (2012) added that training is a combined and ongoing procedure between the employee and the organization aimed at general improvement of the individual and in turn the organization. Moreover, Akinyemi, Okebukola, Olorunfemi, Ofem, Ayoola and Yahya (2014) opined that training can be unspoken as the procedure of teaching employees new skills that are indispensable to accomplish their jobs. Thus, it is generally functional instantaneously after employment, but in some organizations, employees undergo training periodically that can be understood as "developmental training." Training, therefore, is an organized change of knowledge, skills, and attitudes required by employees to perform adequately on a given task or job. Thus, the authors conclude that training is the process of enhancing the skills, capabilities, and knowledge of employees for doing a particular job.

Ceylan (2013) further opines that the training of librarians and library assistants can be responsible for the self-assurance that limits mental techno stress. Gohil (2013) sustains that training and development of library staff in any academic library back considerably to efficiency because trained staff are interested and better equipped to utilize their knowledge, skills, and abilities. Therefore, it is appropriate for librarians to train library assistants as a means of endowing them for future projects and accountabilities.

Lockhart and Majal (2012, pg.16) highlighted the need for training by stating that all employees must be inducted into training programs to develop their job-related knowledge, skills, and performance. Similarly, the American Library Association (2013 emphasized that the library personnel is responsible for the maintenance of the library and therefore is required to go through some training to equip him or her for the task ahead. Consequently, the training of library personnel is fundamental for the growth and accomplishment of the library.

**2.2.1.1.2 Education.** According to Chiappero-Martinetti and Sabadash (2014), education is the most significant and readily available aspect of human capital. Jabbari, Roll, Bufe and Chun (2021) stated that education is one of the most essential tools for growing human capital. Correspondingly, law (2010) stated that human capital can be enhanced by education. Likewise, Adom and Asare-Yeboa (2016) indicated that education is one of the essential pillars of human capital as a result of its ability to internalize skills and knowledge related to productive activities. They highlighted in their study that Individuals who are highly educated through schooling, have a competitive advantage in adopting the information and abilities that make them extremely efficient and innovative in doing a given work.

Dimov (2017) posited that in connection to the work at hand, education represents the more broad characteristics of human capital. He (2015) postulates that education adds to human capital development which is necessary for productivity and innovation. According to BarNir (2012), education is a measure of one's ability to learn, the scope of one's experience, and the overall depth of one's knowledge. Education is the process of learning knowledge, skills, and talents to improve one's productivity and work performance through obligatory, secondary, and vocational studies (Kwon, 2009).

**2.2.1.1.3 Experience.** Experience is the human capital asset accrued through learning-by-doing (Unger, Rauch, Frese & Rosenbusch., 2011). Ployhart and Moliterno (2011) contend that "Experience is a multifaceted construct that reflects an opportunity to learn and transfer knowledge from generic to job and firm-specific". Work experience according to Aforo and Antwi (2012), is a short voluntary period at the workplace, to gather knowledge of a working environment. Harvey, Locke and Morey (2002) identify work experience as any experience that individual gains while working in a specific field or profession, but the manifestation is extensively used to describe a type of volunteer work that is generally intended for young people, particularly undergraduates, to develop a feel for qualified working environments.

According to Blackwell, Bowes, Harvey, Hesketh and Knight (2000) work, experience is the same American meaning as an internship, which means to undergo training on a skill or profession for a particular period, and yet the engagements are typically voluntary, travel and food expenditures could sometimes be covered, and at the end of the engagements, a character reference is habitually provided. Correspondingly, National Council for Work Experience (2004) sees work experience as a specific period that a young person spends working with an employer as a practice of training and knowledge. In the general working environment, work experience could be described as the specific period of activity in an organizational setting, in which a person who may be remunerated or unpaid, commits himself or herself to a program of study or assignment or profession, regardless of whether the work experience is an essential part of the program of study.

According to Mc Donnall and O'Mally (2012), paid employment, internships, co-operative learning, volunteer experiences,' live' project work, part-time employment, and the length of previous occupations are all examples of work experience. Boateng (2012) citing Batjargal (2005) indicated that an organization's experience is completely connected to the organization's growth and the number of the organization's members and their maturity/age levels are philosophical of the organization's training, understanding, abilities, and capability.

Brenya (2014) opined that experience is very powerful in the efficient development of an organization. However, Malaolu and Ogbuabor (2013) assert that work experiences are equivalent to training and development, as it is one of the most indispensable dimensions of Library Human Resource Development and to get the above-noted skill and knowledge, the current technologies Training and Orientation programmer is a single way. Thus, Hess (2020) added that work experiences originate exact learning actions that will paramountly assist in the knowledge process, eventually consequential in moderately enduring modification in developmental potentiality.

Mayer, Somaya and Williamson (2012) distinguish between two types of work experiences which are industry-specific and firm-specific work experiences. According to Capozza and Divella (2019), the term "industryspecific experience" refers to all of a worker's knowledge and abilities gained over the course of their careers and is thus limited to specific technologies and industries. Additionally, industry-specific experience involves individuals internalizing their experiences and incorporating them into their human capital (Weterings & Koster, 2007). Furthermore, Doving and Nordhang (2002) described firm-specific experiences are task-specific competencies tied to a single organization, and they comprise abilities required to execute a specific task in the firm, knowledge of the firm unique work practices, and competencies required to operate custom-made equipment. For the purpose of study, the present study focuses on firm-specific experiences.

**2.2.1.1.4 Skills.** Skill is an important component of human capital. Skills can be defined as the capability to execute a certain physical or mental task (Sujchaphong, 2013). Sharma (2004) describes skills as the ability to utilize one's knowledge effectually. Employee skills are important in an organization

to produce goods and products which makes the organization more competitive (Nieragden, 2000).

Omeiza and Lanre (2019) opined that for Library employees to remain relevant and manage the library efficiently they need to possess multiple skills which enable them to adapt to the modern trend and the employment of information technology in executing library operations. Furthermore, library employees should possess different skills which include but are not limited to technical skills, human skills, time management skills, communication and customer service skills, adaptability skills, and computer skills which enable them to be productive at work (Ugwu & Ezema, 2010).

Technical skills are capabilities a person attains through education and training. For instance, library employees can learn how to troubleshoot new technologies if they encounter any problems (Ahmad & Yaseen, 2009). Technical skills can also be defined as the capacity to work with resources in a specific field of expertise. For instance, library professionals should possess a good strong knowledge of the evolving technologies and be capable of translating the library services into an online medium (Ahmad & Yaseen, 2009). Okiki and Durododu (2018) reiterate that the emerging technology requires library professionals to attain new skills to be able to use the search engines to find relevant and accurate information for the library users. Human skills involve the ability of librarians to converse and work effectively with other people (Bhattacharya, Gibson & Dotty, 2015).

Problem-solving skill is an essential skill for a library professional which is the ability of a library professional to identify a problem and solve it at a suitable time (Reddy & Jyothy, 2014). An organization is effective and can provide excellent services to its customers if it possesses employees with good communication and customer service skills who can communicate clearly and respectfully with customers and who can meet the needs of the customers and provide their services on time (Ahmad & Yaseen, 2009). Also, adaptability skills such as attending adaptably and proactively to challenges as they occur, enable the organizations to make rapid changes in the situations to avoid any further damages which will therefore impact the organization positively (Muzio, Fisher, Thomas & Peters, 2007). Somvir (2010) opined that librarians should possess adaptability skills such as the ability to embrace new changes and transformations. Additionally, a librarian should have a keen and concerned attitude regarding new resolutions because of the abruptly and imminent changes in the library.

**2.2.1.1.5 Leadership.** Leadership is considered an important component of human capital (Movahedi, Tavakoli, Ghasemi & Berjis, 2015, Vidotto, Ferenhof, Selig & Bastos, 2017). According to Khan, Ismail, Hussain, and Alghazal (2020), leadership is a strategy for influencing individuals to achieve specified goals or outcomes. Both the proactive, task-related conduct of the would-be leader and the general, culturally imposed appraisal of that behavior in the circumstance are used to determine leadership (Riddgeway, 2001).

"The ability to establish a compelling vision and transform vision into organizational realities" is what leadership is defined as. In a nutshell, the definition of leadership was the ability to turn a vision into reality. Leadership is also defined as "a series of acts that produces something or leads to a specific result" (Silva, 2016). Transactional, transformational, charismatic, narcissistic, and Machiavellianism leadership behaviors have all been studied in the past, however, for the sake of this study, self-leadership was employed (Marvel & Patel, 2017).

According to Houghton and Neck (2002), self-leadership is the process of people influencing themselves to attain the self-direction and selfmotivation required to act and operate in expected ways. Castellano, Chandavimol, Khelladi and Orhan (2021) and Marques-Quinteiro, Vagas, Eifler and Curral (2019) describes self-leadership as a technique through which employees in the workplace manage and regulate their behavior, cognition, and motivation. Inam, Ho, Sheikh, Shafqat and Najam (2021), posit that selfleadership consists of two perspectives: self-imposed approaches for overseeing the work of duties with low intrinsic motivational potential and selfinfluence, which concentrates on the natural rewards that result from completing the task itself.

**2.2.1.1.6 Motivation.** Motivation is viewed as a fundamental component of human capital (Vidotto et al., 2017). "Motivation is the desire that pushes a person to act in a certain way to obtain a certain level of fulfillment" (Beerli & Martin, 2004). Madukoma et al. (2014) postulate that Motivation is a governing factor that allows individuals to remain oriented on the path to success, despite the obstacles they face in achieving personal and professional goals and objectives.

Motivation is a term that describes the psychological forces that shape an individual's behavior, amount of effort, and endurance in the face of adversity (Hoang, Luu, Nguyen, Du & Le, 2022). Motivation is defined by Asah, Fatoki and Rungani (2015) as the procedure that accounts for a person's strength, purpose, and willingness to exert in achieving a goal. Deci and Ryan (1985) divided motivation into two categories: intrinsic motivation and extrinsic motivation. , but for the current study, only intrinsic or selfmotivation is employed.

Intrinsic motivation is described as the desire to do something only to do it, to experience the joy and fulfillment that comes with it (Kuvaas, Buch, Weibel, Dysvik & Nerstad, 2017). Intrinsic motivation is a term that describes a person's innate drive to do something. Accomplishment, triumph, ambition, and competence are examples of intrinsic drives that come from doing one's job (Chien, Mao, Nergui & Chang, 2020). Intrinsic motivation is a type of autonomous motivation that refers to a person's desire to complete a task for its purpose rather than for some other external motive (Chiu, 2018).

2.2.1.2 Theories of Human Capital. In this sub-section, the important theories will be studied and explained.

**2.2.1.2.1 Gary Becker's View on Human Capital.** According to Becker (1962), human capital signifies an employee's capabilities and personal attributes that make them efficient when performing their tasks. One of the most vital components of human capital is knowledge which is attained from education and training, but other components are fairly important too such as being able to manage time effectively, the ability to follow company ethics, etc. Therefore, a vested interest in human capital mostly signifies education but it also encompasses other factors such as employees' personalities. The author distinguishes between general and specific human capital. Specific human capital arises from employees acquiring knowledge related to their organization, such as the know-how to utilize "exclusive software". Organizations are interested to invest in this type of human capital since it is not exchangeable and keeps an employee in the organization hence the organization remains competitive.

Becker (1994) emphasized that organizations are now placing importance on the employee's education since being educated means that employees can deal with the global changes such as new technologies without any complications. Organizations are now interested in educated employees because they come up with new ideas and strategies to boost the organization. Also, apart from employees' education, organizations provide employees with further learning and training at the workplace to enhance their productivity for instance employees enhance their efficiency at work by attaining new skills and improving their previous skills by attending on-the-job training. Also, interns acquire skills about how to perform their tasks whilst on the job. Hence, on-the-job training is encouraged to enhance employees' productivity. Therefore, inadequate investment of human capital jeopardizes the growth of the organizations since it meant employees were not fully knowledgeable and skilled to perform certain tasks or operate modern machines (Nafukho, Hairston & Brooks, 2004).

**2.2.1.2.2 Bontis and Girardi's view on Human Capital.** Bontis and Girardi (1999) describe human capital as the individual and substantial knowledge of all employees in an organization. Employees in organizations

are identified as expert employees since they contain skills and expertise that assist them in providing most of the intellectual horsepower of an organization. Also, expert employees are typically responsible for providing most of the greater added-value services to the organization. Furthermore, the human capital rooted in these employees is imperative since it results in innovation and strategic rejuvenation of an organization.

**2.2.1.2.3 Leingnick view on Human Capital.** According to Lengnick and Lengnick (1988), human capital is considered valuable if its context-specificity that is employee skills are specific to a particular organization or cannot be imitated or transferred to another organization. Furthermore, the authors highlighted that some human capital is valuable to a specific organization. For instance, obtaining knowledge of an organization and the knowledge is not transferrable if the employee joins another organization. Additionally, the authors mentioned that some human capital is valuable only within the context of a specific industry. For example, technical jargon is often industry-specific. It has value only within a specific industry. An individual who changes from a marketing job in the furniture industry to a marketing job in the video game industry will likely need to learn a new language.

**2.2.1.2.4 Weiner's view on Human Capital.** Weiner (1996) ascertains that training in areas that are not job-related might be as significant as job-specific training since it intensifies the knowledge "repertoires", of individuals and henceforth enlarges the knowledge "repertoires" of organizations. Weiner (1996), reiterates that extensive skill repertoires can be vital in a job or an organization. An organization possessing a bigger repertoire of human capital may have strategic capability empowering them to manage effectively with any evolving circumstances.

**2.2.1.3.5 Theodore Schultz's View on Human Capital.** Schultz stated that human capital could be invested in education and training and therefore increase the production and quality of products and goods of the organization. He stated that education makes employees more productive in performing their

jobs (Krasniqi & Topxhiu, 2016). Schultz (1961) recommended that employees especially entrepreneurs who are involved in farming should have the ability to adapt to technological and environmental changes. Entrepreneurship ability is a method of human capital that can be enhanced through education, training, and work experience. Investment in education results in enhancement in mechanical and allocative efficiency. The advantages of employees upgrading their education leads to improved capabilities to adapt to change, for example by adopting new methods of conducting business.

**2.2.1.3.6 Nelson and Phelps' view on Human Capital.** Nelson and Phelphs (1966) support Schultz's (1975) view on human capital by describing human capital as the capability to adjust to ever-changing environments. Schultz and Nelson and Phelps contend that human capital is especially valuable in dealing with unpredictable circumstances, or more commonly, with circumstances in which there is a shifting environment, and employees have to acclimatize to this. They postulated that the human capital of an organization is a critical factor enabling the implementation of new and more industrious technologies. Furthermore, in a period of sustainability, organizations are gradually turning to their employees as a basis of innovation and inspiring them to discover new ideas and procedures to function more sustainably. Therefore, an organization's human capital can be fundamental in an organization's adjustment to unknown or fluctuating environments.

#### 2.2.2 Employee Job Performance

### 2.2.2.1 Definitions of Employee Job Performance

Kappagoda (2018) describes employee performance as apparent activities that employees conduct in their jobs that are pertinent to the objectives of the organization. Additionally, the author defines employee performance as the employee's aptitude in executing tasks that were stipulated in their job description. Correspondingly, employee performance expresses the level to which an individual accomplishes the duties stated in their job description. This consist of the completion of the duties and delivery of the undertakings requisite for the job role (Nwokike & Unegbu, 2019). Okolie and Kawedo (2018) perceive employee performance as the extent to which employees demonstrate skillfulness in tasks that are officially identified as part of their jobs which adds to the organizational effectiveness. Ugwu and Ugwu (2017) illustrate employee performance as the degree to which employees carry out their daily work. Amusa et al. (2013) ascertain that library employee performance is that aspect of work behavior that is of relevance to the library's success.

According to Nwokike and Unegbu (2019) library employees are faced with many responsibilities which contribute to the success or the development of the library such as the ability to respond promptly to clients' appeals, knowledge to arrange job responsibilities, and work autonomously and exhibit an understanding of library materials and resources.

### 2.2.2.2 Dimensions of Employee Job Performance

The three performance measures used in this study are task performance, contextual performance, and adaptive performance.

**2.2.2.1 Task Performance.** According to Kappagoda (2018) task performance is described as actions that are directly associated with the fulfillment of the job. Also, "task performance describes an employee's implementation of the fundamental responsibilities that might be officially listed in his or her job description." Additionally, task performance illuminates mandatory activities of an employee such as finishing tasks on time, producing quality and quantity work, ability to make decisions, ability to solve problems and having skills and knowledge of the tasks performed, etc. (Ugwu & Ugwu, 2017).

Task performance is also defined as an employee's carrying out the essential duties that might be ceremoniously registered in his or her job description. This refers to actions specifically facilitating the creation of goods or services (Peng, 2014). Consistently, Diaz-Vilela, Rodriguez, Isla-Diaz, Diaz-Cabrera, Hernandez-Fernand and Rosales-Sandez (2015) explained that task performance is specified duty an employee should conform to achieve

organizational goals. Moreover, when employees employ technical skills and job particular knowledge to complete a task they are participating in task performance (Van Scotter, Cross & Motowidlo, 2000).

**2.2.2.2 Contextual Performance.** Contextual performance according to Ahmad (2014) is the activities of an employee that contribute to the social and psychological core of the organization. According to Eldor and Vigoda-Gadot (2017), contextual performance captures the ability of employees to involve in activities that contribute to the overall well-being of the organization. Correspondingly, Farooq, Zia-ud-Din, Iram and Nadeem (2018) defined contextual performance as the ability of employees to contribute to the overall well-being of the organization. For example, it could be seen as the ability of library workers or their willingness to do other tasks which are not related to their main tasks.

Also, contextual performance represents unrestricted and optional jobrelated activities, such as working tirelessly and assisting others, which casually lead to organizational success but then are not ceremoniously known as part of the job (Gellatly & Irving, 2001). Similarly, contextual performance characterizes non-job-related tasks which include those tasks which a librarian is required to take which do not relate only to a particular job. It pertains to the librarian's ability to execute tasks or implement performance activities that are not associated with their particular jobs. Additionally, the contextual performance of a librarian is shown when they are dedicated, committed, and make an effort to accomplish their tasks (Nwokike & Unegbu, 2019).

Van Scotter et al. (2000) ascertained that contextual performance includes participating in activities such as assisting others to finish a task, working together with their supervisors, or recommending methods to increase the organizational processes. Additionally, contextual performance is elucidated as behaviors that are linked to communications with colleagues, supervisors, and patrons and are also related to behaviors that exhibit discipline, determination, and enthusiasm to use endeavor. According to Kehoe, Lepak, and Bentley (2018), although task performance is necessary, contextual performance boosts the organizational climate through strengthening social networks, and this is because when employees engage in contextual performance it contributes to the culture and climate of the organization. This is why the authors submitted that contextual performance can transform the organization because employees volunteer for extra work, persist with enthusiasm, and help and cooperate with others.

Contextual performance is defined as voluntary cooperation and assistance to coworkers in need, the prevention of work-related difficulties, and having an interest in others. Contextual performance is also defined as helping actions such as cooperating and assisting colleagues in need, preventing workrelated problems, and showing concern for others (Chiniara & Bentein, 2018). Contextual performance is defined by Williams and Anderson (1991) as a set of generalized compliance behaviors that include being conscientious, showing up on time, not complaining, and respecting organizational rules.

Ahmad, Iqbal, Javad and Hamad (2014) stated that the library has to reconsider its facilities and deliver extra elastic user-centered services. This contextual performance is expected if there must be effective in the organization. These extra elastic user-centered services according to Bhanabhi and Patel (2013) had better be considered by the facility of appreciated information resources that previously exist inside the library walls to users outdoor, and also deliver distant admittance to resources outside the library walls. In this situation, the hybrid library prototypical contextual performance can serve diverse user groups in a knowledge-based society.

**2.2.2.3 Adaptability Performance.** According to Jundt, Shoss and Huang (2015) adaptive performance has been regularly defined as established expertise or performances that lead an individual to sustain performance in the course of unforeseen deviations. It has been established to have both positive aspects, such as protective actions concerning apparent imminent modification, and responsive mechanisms, such as adjusting one's behavior owing to modification. The above authors' also defined adaptive performance as task

performance-directed behaviors individuals endorse in reaction to or expectation of changes applicable to job-related tasks. For example, employees can cope with the changing needs and demands of library users.

Ployhart and Bliese (2006) define individual adaptability as representing "an individual's ability, skill, disposition, willingness, and/or motivation, to change or fit the different task, social, and environmental features." Some of the notions regularly used when discussing adaptive performance according to Jundt et al. (2015) consist of adaptability, adaptation, adaptive expertise, adaptive transfer, and performance adaptation. Procedures such as problem resolving, tractability, and managing are often used as synonyms of adaptive performance, as well, and although these procedures may play a role in adaptive performance in definite circumstances, they do not properly characterize the all-encompassing conceptualization of adaptive performance.

Adapting to novel or dynamic and changing situations frequently requires one to solve new and unfamiliar problems. Accordingly, Baard, Rench and Kozlowski (2014) added that one aspect of adaptive performance that has been discussed by several authors involves the effectiveness with which employees solve the atypical, ill-defined, and complex problems that confront today's work situations and organizations. Concerning library employees, this feature of performance necessitates the employee to bring multifaceted difficulties or circumstances to their anticipated conclusion or cultivate creative resolutions to new and difficult problems.

However, several authors have also discussed adaptability concerning a wide variety of unpredictable and uncertain work situations. These situations according to Hardin and Donaldson (2014) can result from diverse aspects, including such things as formal organizational restructuring, shifting business priorities, decreases or modifications in available resources, or joining a new organization or group. Important parts of the performance that relate to such events include how effortlessly library workers bend to and deal with the changeable nature of these circumstances, how professionally and efficiently they can shift their orientation or focus when necessary, and the extent to which they take a sensible deed of their readers, despite essential improbability and uncertainty in the circumstances.

Corroborating the above, Ezema et al. (2014) opined that libraries must redefine their specialized role as providers of information literateness to as multimodal information centers including facts as well as recovery and invention. Nevertheless, Gohil (2014) added that librarians' adaptability performance needs to be redefined in the physical library as organizers of multimodal literateness and this must be done in close collaboration with other partners in progressing public civilization.

In this context of adaptability performance in technological innovative library services, a universal review of literature by Gohil, (2013) citing Blummer (2007) uncovered that the educational library services and resources have proceeded through three segments of development. The first segment according to him was grounded on providing information about the library on the web or physical library online since the early 1990s, while the second segment concentrated on digital libraries or virtual libraries since the late 1990s where the libraries presented online assemblages and services. It could however be said that adaptability performance capabilities embrace not only the capability to access, but also to use mediatized methods of communication, and it signifies not only the capability to save and obtain information but also to create such forms of information.

### 2.2.3 Innovation Capability

# 2.2.3.1 Definitions of Innovation Capability

From a resource-based view (RBV), innovation capability is perceived as a one of a kind resource that permits organizations to swiftly and efficiently embrace new procedures and practices, as well as create or offer new and enhanced goods in response to market changes (Agyapong, Ellis & Domeher, 2016; Lawson & Samson, 2001). Additionally, according to the RBV researchers, innovation capability is defined generally as reactions to market or technological advancements, including the outlook taken and modifications

made within an organization (Damanpour 1991; Garcia & Calantone, 2002; Harmancioglu, Droge & Calantone, 2007).

Innovation capability can be defined as the procedure of utilizing a novel idea or concept for a product, service, business model, or method that will generate or enhance value in an organization (Pedron, Picoto, Colaco & Araujo, 2018). Gabner, Posch and Wabnegg (2018) define innovation capability as an organization's capability to create new solutions to address customers' present and future needs.

Rajapathirana and Hui (2018) define innovation capability as an introduction of a completely new product or service to the organization or re-configuration or improvement of existing services. Additionally, innovation capability is defined as the capability to constantly convert knowledge and concepts into novel products, processes, and structures, and to gain exceptional technological and management performance (Saunila & Ukko, 2012).

### 2.2.3.1 Dimensions of Innovation Capability

The current study utilizes the concept of innovation capability, which comprises service and technological innovation, organizational innovation, and marketing innovation.

**2.2.3.1.1 Service and Technological Innovation.** Service innovation refers to the process of creation and subsequent introduction of a service (Rajapathirana & Hui, 2018). Similarly, service innovation is defined as the ability to obtain and integrate external knowledge, change it into fresh, distinctive capabilities and ideas, and then yield these ideas by initially creating and then effectually commercializing new or improved products (Saunilla & Ukko, 2012). Implementation of service innovation creates organizations to become more adaptable in their operations and it pushes organizations to develop the quality of their products and services (Githikawa, 2011).

Toivonen and Tuominen (2009) propose that service innovation encompasses modifications in practices and provides exceptional value to users, employees, employers, partners, and communities. Islam (2016) postulated that service innovation in libraries denotes the creation of novel ideas and the determination to discover methods to employ those ideas in practicable ways. Additionally, in the context of libraries, service innovation incorporates creating library websites or interfaces which are paramount to users, new methods of sharing or disseminating information to users, new technological applications, new techniques to arrange and administer services, and novel kinds of services that enhance user experience and gratification, and constantly upgrading the collections/facilities so that there are more useful to users.

Service innovations in libraries include a self-check-out device that allows users to promptly check out on their own the books they borrowed and capacitates users to avoid having to wait in long lines at the circulation desk ( Jantz, 2016). Also, service innovations in libraries involve implementing the use of short message services (SMS) or text facilities available on all mobile phones, which could be used to create awareness amongst the academic library clientele about upcoming events and new arrivals (Iwhiwhu, Ruteyani, and Eguhwubare, 2010).

Libraries can develop a service to provide e-books to users to enhance their service delivery and improve performance (Rowley, 2011). Also, Libraries can make use of federated search engines which will allow users to instantaneously access multiple online databases. Furthermore, for libraries to provide agile services and be more responsive to users they can employ the radio frequency identification (RFID) which quickens the procedure of returning books to library shelves fasters (Islam, 2016).

Innovative services in libraries also involve the availability of network access points and wireless hotspots in different areas of reading rooms, which is opportune for users of online sources. Innovation in providing and delivering services in library services incorporates the establishment of e-services which provides 24/7 immediate access to e-journals and e-books throughout the year. Additionally, another modern way of providing services

in the library is the introduction of "book a librarian service," this involves a librarian providing users with individual guidance and assistance in literature and information retrieval within a particular subject/field of the users' research project. The librarian, for instance, assists in selecting suitable search strategies and selecting relevant databases, supervision in choosing and assessing relevant sources, and helps in maintaining track of the information sources used in the research projects (Hong & Yan, 2016).

Furthermore, service innovation in libraries encompasses tailor-made courses which will assist users in how to use computer-based reference programs such as Mendeley and End Notes. Moreover, another initiative made by libraries in improving service delivery for users is a formation of a blog to fetch ideas and suggestions from users and comment on others' opinions on how library services can improve (Scupola & Zanfei, 2016).

Avdeeva (2010) in his study of a Russian State library discovered that they provide innovative services such as offering online dissertation services and online reading rooms. Islam, Agarwal and Ikeda (2015) in their study of academic libraries in developing countries found that their most innovative services include making use of recommendations, ideas, and feedback from users, looking for cases of virtuous practices in other libraries, attending library conferences to emulate what others are doing. Furthermore, the academic libraries also brought in innovation services by making use of ICT tools in the library, information literacy services, and reference and user-centered design services.

Technological innovations in the library involve implementing both traditional and non-traditional methods to provide services such as the use of new information and communication technologies to communicate with users, for instance, the internet, blogs, wikis, email, and skype. Additionally, the new technologies that are used in the libraries include automation of library services, online library services, e-learning platforms, virtual catalogs, databases, and digital collections, computer hardware such as scanners and webcams, and open access movements (Carvalho, 2010).

Correspondingly, information and communication technology innovations in libraries include library automation which permits users to search for information from everywhere at any time, can effortlessly do the online reservation of library resources and allows for self-check-in and selfcheckout of books, access to online resources 24/7, and virtual reference (Muthu, Rameshbabu & Baskaran, 2018). Information and service communication technology modernizations in libraries encompass transforming the old fashioned or manual way of accessing information with the implementation of an online public access catalog (OPAC) an information retrieval system, which has brought about sophisticated and instantaneous ways of locating, accessing, and retrieving information resources (Eserada & Okolo, 2019).

The developments of computer technologies have resulted in libraries drifting from providing printed sources to providing electronic sources which are furnished with strong search and retrieval apparatuses that permit users to conduct information searches more efficiently and proficiently. Electronic resources provided in libraries include journals, e-thesis, dissertations, e-books, e-newspapers, e-conferences, websites, bibliographic databases, and article databases (Lata, 2015).

Needham and Ally (2015) opined that implementation of technological innovation involves the adaptation of mobile technologies to provide novel services to users, for instance, the technological innovation service includes the use of library SMS services might be utilized to enable swift managing and reaction to user inquiries and also create alertness about approaching events and new acquisitions.

Dharwal (2015), posits that technological innovation in libraries comprises an integration of mobile technologies for the provision of superior user-directed services, for example, mobile text reference service where librarians can provide instant responses to the inquiries of the users and provide links to journal articles. Additionally, the implementation of mobile technology in libraries facilitates library database browsing which enables users to look for and find information sources attainable in their community libraries through a web application they can ingress through their smartphones. Furthermore, the use of mobile technologies in libraries expedites the provision of virtual resources such as e-books, e-journals, e-dissertations, e-newspapers, audiobooks, web, images, and bibliographic articles databases which can be used on mobile.

Caperon (2015, pg.207) stated that technological innovations in libraries incorporate the provision of cutting edge technological facilities such as mobile apps which provided beneficial mobile services to users by allowing them to autonomously access information without the help of the librarian. For instance, an app allows users to examine the barcode of a book to discover if it's in the library and allows users to identify and discover books and their locations.

Anbu and Kataria (2015) postulated that due to the advances in information and communication technology and an increase in the number of users using web-enabled mobile devices, libraries need to develop a complete mobile website so that they can keep abreast with changing needs and behaviors of users. Moreover, technological innovations in a library service encompass the transformation of a bookless library which means no printed books for particular disciplines. Also, technological innovations in libraries include the substitution of stack book storehouse and conservation with electronic book repository and electronic maintenance and the use of RSS feeds or related technology to deliver library news and event illustrations to library patrons (Jantz, 2016).

Technological innovations in library services comprise the use of emerging technologies such as the implementation of the RIFD system which allows users to get books issued from the library independently and return them using a self-return kiosk which is fast, efficient, and eliminates the errors which can occur when using the traditional issue and return system (Goyal, 2013). Correspondingly, Gupta and Margam (2017) describe technological innovation in libraries as the adaptation of the latest technologies to render superior and efficient services to users such as the application of the RIFD system. The application of the RIFD system consists of numerous benefits in the library service which include the ability to detect theft, regularly updating new library collections of books, and enriched automated check-in or check-out which thus enhances users' satisfaction.

**2.2.3.1.2. Organizational Innovation.** According to Martin and Delawska-Elliot (2015), organizational innovation comprises of re-structuring of the library such as a shift from librarians working independently to working in a team to render services to users. This new team tactic deviated individual tasks to a collective one and warranted that all users' appeals would be responded to promptly. Awais and Ameen (2019) posit that organizational innovation in libraries encompasses building alliances with other libraries to exchange and share the collection development. Similarly, organizational innovation involves constructing partnerships with other librarians from other organizations which will make it easier to co-operate and share resources that are not physically attainable in their library (Sidorko, 2007). Bieraugel (2015) opines that innovation in library organizations incorporates including users in the process of producing new services and products that will fit the desires and needs of the users.

According to Scupola and Zanfei (2016) on their study of a Danish Library sector, organizational innovation in libraries in the 21<sup>st</sup> century comprises hiring an information specialist whose role is to investigate and assess the users' data activity so that they can provide services that are aligned to the needs of the users. Additionally, organizational innovation entails constant minor transformations in front-line services, primarily based on service innovation and attending to users' requests. Furthermore, another example of organizational innovation is the increase of the library opening hours till midnight, throughout the year and the introduction of the library access card which allows users to access the library services and resources without the assistance of the librarian.

Hong and Yan (2015) opined that organizational innovation comprises designing a modern library that has expansive reading rooms with open managed bookstands where periodicals and books are well organized for users. Similarly, organization innovation entails a serviceable contemporary library which includes greater spacing for computers, a study area with channels for laptops, and a space for discussions (Martin & Elliot, 2015).

**2.2.3.1.3 Marketing Innovation.** Innovative marketing strategies in libraries encompass constantly upgrading the University library webpage or website to communicate and raise awareness of the available electronic resources to users such as journals, books, and databases prescribed by the library (Jesubright & Saravanan, 2019). Similarly, the study of libraries in India revealed that the most frequently used innovative strategy to promote library services is the utilization of an innovative library portal which consists of innovative features that enable the transmitting and posting of online videos about library resources and services (Bhardwarj & Banks, 2019).

Correspondingly, innovative marketing strategies in libraries comprise the use of up-to-date library websites which consists of novel features, such as graphic and multimedia advertising that has a positive effect on users. The websites are also interactive which allows the librarians to communicate and share information with the user (Goyal, 2013). Pant and Gupta (2015) concur with the above statement by stating that modern marketing schemes include the use of ICT-based networks such as library websites and emails to advertise their products and services to users.

Furthermore, marketing innovation in libraries, incorporates the adaption of electronic methods such as the implementation of the Online Public Access Catalogue (OPAC) to efficiently distribute their resources and services to users (Zubair, Wan & Noor, 2018). According to Khan and Bhatti (2012). in developed countries Libraries are using modern trends to advertise and market their services, resources, events, collections, and products for example the use of social media tools such as Facebook, Twitter, My Space, YouTube, Flicker, blogs, and podcasts to get in touch with library users and to make

library programs and services available. Therefore, it is advised for libraries globally to adapt to Social media marketing of library libraries which is fundamental to marketing library products and services among virtual users as it permits users to create, link, interact and share information and helps libraries to get closer to the users.

Libraries need to adapt to recent marketing technologies to deliver effective and productive services to users. Recent marketing technologies that can be adapted by libraries include regularly broadcasting e-newsletters to advertise library services, the use of blogs to give detailed information on new research events, and information sources conducted by the library. Additionally, modern marketing technologies which can be adapted by libraries also include the use of email alerts about new articles, journals, subscriptions, and publications that might be of interest to users, and providing users with remote access to subscribed library databases at any point fin time (Jesubright & Saravanan, 2019).

### 2.2.4 Human Capital and Employee Job Performance

According to the HCT, human capital signifies an employee's capabilities and personal attributes that make them efficient when performing their tasks (Becker 1962). Likewise, the RBV, holds that worthy and exceptional human capital resources such as high mental abilities, allow employees to create the most efficient technique for doing needed activities in each job (Wright, McMahan & McWilliams 1994). Sari (2015) stated that human capital enables employees to produce quality and quantity work and accomplish their job tasks promptly which translates to improved performance. Employees can operate more quickly and successfully with the help of human capital, which improves their job performance and, in turn, the organization's performance. As a result, organizations with higher human capital stock are likely to perform better (Elsharnouby & Elbanna, 2021).

Katuli-Munyoro and Mutula (2016) asserted that human capital is the most valuable resource that is integral in improving the performance of library professionals and leads to the effective and efficient delivery of LIS curricula.

Asonitis and Kostagiolas (2010) opined that human capital plays a significant role in enabling library professionals to complete their duties successfully, deliver quality services, attain their goals and improve library performance. White (2007) stated that human capital enhances library professionals planning procedures, as well as their ability to make good decisions, and perform effectively, resulting in an overall improvement of the library performance.

Lo and Stark (2020) alluded that a combination of human capital attributes such as knowledge, skills, competencies, and other essential characteristics are important elements that contribute to employee performance in library organizations. Saeedi, Alipour, Mirzapour and Chaboki (2012) noted that human capital increases employees' decision-making and productivity, resulting in improved work performance.

Camfiled, Giacomello and Sellitto (2018) posited that an upgrade of human capital attributes skills, knowledge, and expertise contribute to greater and improved communication and decision-making skills and eventually enhance their work performance. Delaney and Huselid (1996) and Martin, McNally, and Kay (2013) alluded that a combination of human capital attributes such as training, education, skills, abilities, competencies, and other essential characteristics contribute to employee performance.

Samagaio and Rodrigues (2016) found that a diverse combination of human capital facets such as professional proficiency, skills, experience, and knowledge all principally contribute to better performance among employees. Liu (1997) and Cheng, Liu, and Chien (2009) point out that investments in HC that incorporate, the educational levels of employees, work experience, professional certification, and training could enhance employees' expertise and skills and result in increased quality work and performance.

Although human capital has been shown to have a significant impact on employee performance in the literature, little study has been done to examine the impact of human capital on employee performance in a library setting, particularly in the Southern African region. Previous human capital and employee performance research has mostly focused on the manufacturing industry (Yen, 2013). As a result, this study was driven by a desire to gain a more complete understanding of the relationship between human capital and employee performance in a library setting in Southern Africa, notably in Namibia, South Africa, and Zimbabwe.

### 2.2.4.1 Human Capital and Task Performance

Human capital facilitates employees to improve their task performance and achieve their goals (Zeb, Abdullah, Javaid & Khan, 2018). Chang and Chen (2011) corroborated that human capital is a fundamental element for employees to attain organizational goals and improve their performance. Jaw, Wang and Chen (2006) affirmed that human capital in an organization is required to accomplish organizational missions and to improve the performance of employees. Ali (2020) claimed that human capital indicators such as training enhanced employees' task performance, which was shown by employees' quality of work, the quantity of work, effectiveness, and efficiency when discharging their duties. Human capital enables employees to perform their responsibilities in a smart, efficient, and better way (Ullah, Javed, Ullah, Sheraz and Burney, 2018).

Bapna, Langer, Mehra, Gopal and Gupta (2013) confirmed that human capital increases employees' productiveness and efficiency within an organization and ultimately enhances their task performance. Roca-Puig, Beltran-Martin and Cipres (2012) affirmed that if employees' level of human capital is nurtured, people develop more proficient means of accomplishing task requirements, thereby increasing productivity and performance.

Wei (2014) highlighted that employees with greater human capital are better at solving problems and accomplishing their tasks. Additionally, human capital improves the quality and the consistency of the work that is delivered. Huang, Yu, Shao, Yu and Li (2020) posited that human capital is an important determinant of superior task performance among employees. This is attributed to the fact that employees who possess higher human capital such as suitable education work more efficiently to accomplish their tasks.

Human Capital is important for employees to discharge their duties well, without these employees cannot discharge their duties well, therefore human capital has a direct effect on employee performance in the organization (Perera & Weerakkody, 2018). Assaker, Hallak and O'Connor (2020) found that there is a positive relationship between human capital and employee task performance. They explained that human capital is particularly important in service organizations because it upgrades employees' communication skills to maintain high levels of contact with the customers, and manage the information flows and variability of service interactions.

According to Unger et al. (2011), human capital leads to higher performance only if it is applied and successfully transferred to the specific tasks that need to be performed. They highlighted in their study that human capital affects task performance since it is related to employees' ability to plan and strategies and the ability to build and accumulate new skills and knowledge. According to the authors, these processes affect performance over time, therefore, the higher the levels of human capital the more effective and efficient they will be in accomplishing their tasks as compared to employees with lower human capital.

# 2.2.4.1.1Training and Education and Task Performance

A library professional who possesses a higher qualification such as a Master's degree in Library Science is well prepared to handle tasks, processes, and workflow. Therefore, a library employee who has a high qualification can perform their tasks thoroughly since he or she is well equipped to understand the organizational vision and which enables them to work towards providing efficient and quality library services (Priestly, 2009).

Khan and Quaddus (2018) discovered that personnel's education delivers chances for providing value-added information services and access to extensive diversity of digital-based information resources that will help a library employee to discharge his or her responsibility successfully. Furthermore, employees who are highly educated can learn and bring new and ground-breaking ideas which are aimed at attaining their set goals and therefore increase their work performance (Munjuri, Obonyo & Ogutu, 2015).

Library managers who hold a higher academic qualification such as a Master's degree are considered valuable assets in an organization and contribute to the development of the organization since they know about organizing and broadcasting information punctually. Additionally, it is recommended to recruit library employees who possess a librarianship degree or diploma because they would contribute to greater and improved decision making and enhanced quality services of the library which thus increases the performance of the library (Arab-Rahmatipour, Foroutan-Rad, Mirhosseini, Arab-Rahmatipour & Aghaei, 2018).

Qualified librarians play an important role in boosting the performance of the library because they can keep up with the new trends in the library and they possess technical skills to use the new technologies properly and timely which attracts more users and increase the effectiveness of the library and accomplish their goals (Ziaei, Amiri, Moghadam & Fayyazi, 2017). Library employees who possess a degree in Librarianship can perform their jobs successfully since they possess discipline-specific and general skills that empower them to use new approaches and technologies to meet users' definite and prospective information needs in their respective fields in the areas of education and research (Panahi, Bayat & Anaraki, 2019). Similarly, library employees who possess a degree in Library and Information science are perceived as attractive by organizations because of their skills in arranging and narrating information as well as their ability to appeal to users and satisfy their needs (Missingham, 2006).

Furthermore, organizations are interested in employees who are highly educated such as being a holder of a Bachelor's Degree, employees who are educated work more proficiently and can perform particular tasks rapidly which improves their work performance. For instance, library professionals who are broadly educated meet customers' needs, wants, and expectations by facilitating customer feedback, to understand what services and resources are important and what changes will be beneficial for them. Hence, this will be useful for employees to improve their task performance, by providing prompt, quality, and quantity services to customers (Kotur & Anbazhagan, 2014). Librarians who have poor academic qualifications face difficulties in performing their tasks, they have challenges in punctually disseminating the appropriate information to the actual person and they lack the confidence to address the users' requests (Gavgani, Shokraneh & Shiramin, 2011). Correspondingly, employees who are not sufficiently educated are not well equipped, skilled, and knowledgeable to accomplish the jobs. Employees who have lower academic qualifications lack the professional knowledge to efficiently handle customer queries and solve their problems. Thus this will result in poor task performance and an undesirable image of the library and its employees (Rehman & El Hadi, 2012).

Furthermore, organizations focus on educating their employees so that they will acquire new skills and improve their old ones in becoming more efficient in doing their jobs. Also, employees are educated about the current machines or technologies and how to use them so that it's easier and faster for employees to accomplish their tasks and therefore increase their task performance and attain their goals. For instance, if employees are aware of how to utilize new technologies they will be able to enhance their production of quantity services by cataloging and classifying many books in a short time without making errors so that they will be accessible to users as compared to when they were using outdated machines, therefore increasing their task performance (Zuhir, Surin & Rahim, 2017).

Investing in training of particular skills, for instance, investing in business development courses and seminars, library employees will be equipped with the requisite skills to perform their tasks effectively a which include marketing skills to increase the awareness and the use of library resources and services among targeted user groups and present a clear, consistent image to the library users, as to what the library offer, this will therefore attract a large number of library users (Kim & Ployhart, 2014).

Warraich and Ameen (2015) argue that library employees who lack adequate training in particular skills such as communication and marketing skills are unable to perform their jobs lucratively because they are not capable to promote

the worth of their services to library users and they are not capable to promote the services of the library effectively and boost the growth of the library. Ramadevi (2017) ascertained that training is critical for library employees to improve their work performance because they can make independent decisions about the daily operation of the library, which saves time and helps to satisfy the needs of the library users.

On the job training furnishes employees with the essential skills to do their tasks creditably which results in an increased work performance, when employees are trained specifically about a certain job such as having marketing skills, he or she has acquired knowledge about or her global market and the rapidly changing needs of the customers and therefore will able to devise good strategic plans to meet the needs and demands of the customers to improve their work performance (Unge et al., 2011). Additionally, the organization makes investments in training their workers since the training acquired by the employees increases their skills and capacity to operate modern technologies, resolve problems, work in a group and produce new ideas and hence increases their efficiency which will increase their task and work performance (Kim & Ployhart, 2014).

Training has a positive influence on employees' task performance since employees can work more swiftly on their tasks and produce quality and more goods than before. Also, training impacts positively on employees' task performance since it refines employees' intellectual capacity to come up with effective decisions in handling future problems. Employees' refined intellectual ability enables them to address customers' needs efficiently and therefore increase customer satisfaction which will therefore increase employees' work performance (Elnaga & Imran, 2013).

Moreover, training is an extremely beneficial tool that increases the knowledge and skills of employees and enhances their job performance, and by doing so enables the employees to do their job properly, effectually, and thoroughly (Alex-Nmecha & Dimkpa, 2016). Likewise, on the job training is vital to increase the work performance of the employee and to boost the overall growth of the organization, for instance, training cataloguers helps in the easy organization and classification of knowledge which will make it easy for library users to retrieve the information (Aina, 2015).

Babayi and Ijantiku (2016) opined that training is imperative for library professionals because it provides the desired knowledge, ability, and skills to enhance the general practice and principles that could help in the practice of librarianship in its entire ramification for effective and proficient Services. Consequently, training helps employees to master knowledge, skills, behaviors, sense of self-worth, and confidence which in turn motivate them to perform efficiently and improve the performance of the organization. Also, when employees are trained, they get their skills improved and develop progression in their skills that will enhance their productivity and performance and subsequently complete their tasks on time (Madukoma et al., 2014).

Furthermore, an employee with essential skills will also possess knowledge about what the customer needs, and the new products and services in the market. An entrepreneur knowing about their environment helps him or her take advantage of new business prospects before others do and will help him or her deal with threats effectively. Hence for organizations to gain a competitive advantage, add value to the organization, and also increase the work performance of the employees they need to be aware of the current global market (Babatunde & Adebisi, 2012).

Moreover, to increase the growth of the library and to ensure employee productivity, efficiency, and effectiveness, it is recommended for every library employee to avail himself or herself of different relevant training and career development programs available within and outside the organization to be more effective in meeting the information needs of library users and thus increase their task performance (Yaya, 2016). Consistently, for library employees to efficiently perform their jobs and responsibilities in the organization they need to undergo staff training programs such as on-the-job training programs and formal library short courses (Saka & Haruna, 2013).

Saka, Oyedum and Song (2016) corroborate by stating that regular training equips employees with necessary skills which enhance their job performance and productivity and thus achieve their organizational goals. In contrast, inadequate employment of on-the-job training results in library employees not being able to perform their assigned duties productively and efficaciously such as shelving, cataloging, filing, etc. (Nkebem, 2005). Sufficient and constant training leads to an effective employee task performance in an organization, for instance, library professionals who are well trained are more productive as well as efficiently and effectively provide adequate relevant and current library collection that matches the information needs of various information seekers that daily or periodically visit the university library (Yaya, 2018).

Similarly, continuous staff training is very crucial to enhance their task performance, therefore libraries are recommended to constantly train their librarians and encourage them to attend short courses in ICT to renew their expertise and skills that enable them to provide quality services to users such as being able to teach and assist library users to identify, evaluate and retrieve relevant and valuable information efficiently and effectively from the electronic databases or physical bookshelves (Abban, 2018).

Bamidele, Omeluzor, Imam and Amadi (2013, pg.3-4) posit that training is fruitful for library employees, it improves their quality of work, increases their productivity by producing more quantity of work, and boosts their knowledge and skills which helps them operate new machines and tools accurately and promptly which enhances their task performance. Also, Amaechi, Enweani and Eke (2018) hypothesize that it is essential to continuously train library professionals to equip them with the required ICT skills/competencies prerequisite for them to be able to provide effective services.

Consistently, Ezeani, Eke and Ugwu (2012) opine that for library professionals to enhance their task performance they need to boost their skills and knowledge on how to employ the new ICTs in the library. Additionally, well-trained library employees can perform their job successfully and engender quality services to the library users because they are aware of the scope and expectations of their jobs (Abba & Dawha, 2009).

### 2.2.4.1.2 Experiences and Skills and Task Performance

Employees who are more experienced produce quality services and improve the performance of the organization since over time they have accumulated more skills on how to perform their tasks efficiently (Greve, Benassi & Sti 2010). Similarly, a library professional with more library work experience performs their job tasks effectively because they have acquired more knowledge of library reference resources and they can rapidly and critically evaluate quality information resources and services irrespective of the medium by which the reference service is provided (Luo, 2008).

The above findings are similar to those of Ugwu and Ugwu (2017, pg.16) who stated that if a librarian works for a long time in the library the more the possibility that his productivity and task performance will improve. Experience gives an employee a more hands-on approach to work, for instance, a library employee will know book indexing by heart so that he or she can issue out as quickly and as efficiently which therefore increases his task performance (Tseng, Wang & Yen, 2014).

Employees who have developed their experiences in a particular job field have become more proficient in how to perform their work, for example, an experienced library worker will become more familiar with the library setup to competently assist library users more rapidly and more efficiently (Yen, 2013). Correspondingly, individuals with more working experience at the same firm contribute to the organization's growth since they have a deeper understanding of the entire organization, they learn from their past work mistakes, they enhance their skills in tackling certain things which are expected of them because of their positions (Perera & Thrikawala, 2012).

According to Oyewole and Popoola (2013) job experience is positively associated with employee task-based performance because an experienced library employee has extensive knowledge of the library users' needs and expectations, so he or she can effectively serve them within the shortest possible time. Additionally, Individuals with more work experience are effective in making good decisions which contributes to the growth of the organization since they have a broad knowledge about the new products and services which are related to library information services, and hence work experience is positively associated with the development of the library.

According to Petek (2018), extensive job experiences in libraries increases the work performance of library professionals, since over time they have gained skills to cope with any challenges or setbacks that occur in the library such as being e able to attend to many library users instantaneously and having the capability to satisfy the needs and the expectations of the library users despite their difficult reference questions. Additionally, according to the author, an experienced library professional can perform their work successfully and capably, since he or she deals effectively with work pressure, he or she will use his time effectively to do their routine work such as cataloging so that they find enough time to serve the needs of the library users (Petek, 2018).

Employees with a shorter tenure are prone to intensify the organization's productivity and value the organization by bringing in fresher ideas. Keeping people for long means you will keep applying the same tired strategy which has no value and competitive advantage for the organization (Ng, Teh, Ong & Soh, 2016). In contrast, librarians with more working experience are unable to do their tasks successfully due to work fatigue, and as their age increases their motivation to work decreases as well (Panahi et al., 2019). Correspondingly, longer tenure experience means employees can predict the trends on how organizations can perform at specific times, for example, if you have been in the meat industry for a long period, in Indonesia, you can predict higher returns in times like the festive the season and public holidays (Herly, 2011).

Library personnel who possess good communication and marketing skills can promote or advertise their library services and resources in a way that can attract a wide subscriber base which can translate to huge revenue in terms of subscriptions which enhances the library's performance (Jain, 2005). Furthermore, library personnel who have good excellent customer service skills, are approachable and friendly, and respond to patrons' requests and complaints immediately, they help patrons search for accurate and quality information sources relevant to their research. Hence, the provision of excellent service results in the patron valuing the library and feeling comfortable to seek for librarians' help in the future which increases the usage of library services and resources. An increase in the usage of the library services and resources which enhances the development of the library (Kaur & Singh, 2011).

Library employees who possess professional skills can rapidly identify the needs of the library users and do it with meticulousness which improves their work performance. Additionally, skilled library professionals can render the best services to their library users by responding swiftly to the request of the users and ensuring that they get appropriate and relevant information sources that are pleasing to them (Moshoeshoe-Chadzwingwa, 2010). Similarly, library professionals who have higher levels of skills and abilities possess good communication skills which enables them to listen carefully to the information needs and inquiries of users in a way that motivates the library users to use the library resources more frequently which keeps the library going (Cobblah, 2014).

Library professionals who have information literate and technology skills and competencies can perform their assignments on time and meet their set goals since they can use the internet to search, retrieve and provide prompt distribution of information to users. Moreover, for library personnel to perform their jobs successfully they need to have cataloging skills so that they can be able to arrange both print and electronic resources in a way that would be easily accessible to library users (Liman, Jain, Grand & Mutshewa, 2017). Consistently, for library professionals to fulfill their tasks competently and to provide a quantity of work they need to possess cataloging skills. Cataloging skills will help library professionals to catalog sufficient information sources as required by users in a manner that is easily located and friendly so that library users can locate and retrieve information independently (Gorman & Corbitt, 2002).

ICT skills allow library personnel to perform their daily work creditably. ICT skills permit library professionals to execute their routine job tasks such as indexing and classifying books efficiently and effectively. Additionally, library professionals who are well versed in the use of the internet and various electronic resources provided by the library such as e-journals, e-newspapers, and e-books will be able to attend quickly to the library users' requests for help (Bansode & Viswe, 2017). Gorman and Corbitt (2002) mention that skilled library professionals show the capacity to scan the environment for new trends and technological developments which apply to the library and information science so that they can improve their quantity and quality of work and therefore boost the performance of the library.

Kont and Jantson (2013) indicate that for libraries to ensure quality service delivery to patrons, the availability of skilled and competent as well as high-performing staff is fundamental. Correspondingly, for library professionals' to warrant efficient and effective delivery of library services to the users they require a lot of skills and expertise of being able to answer users" queries on where to locate documents, how to use given information materials, and how to carry out a research study (Tuitoek, 2014).

Similarly, Basahuwa (2017) ascertains that performing tasks credibly and rendering quality reference services to users depends on the skills and competencies of a reference library librarian. A skilled and competent reference librarian employs his/her comprehensive understanding and search tactic to meet user information needs. Additionally to ensure that the users are satisfied the reference librarians involve themselves in the search process so that the users get accurate, current, and relevant information.

Priestly (2009) postulated that library professionals who have technical skills can implement their jobs successfully because they can manage to work with a countless number of computer systems, accomplish a lengthy burst of comprehensive work, and multi-task recurrently. Employee task performance in a library is achieved if the employees are skilled and knowledgeable about their daily tasks and have a sound understanding of the aims and objectives of the organization in which they are working. Furthermore, highly skilled library employees can partake more intelligently in the work of the library which enhances their work performance (Asante, Adu-Sarkodee & Akussah, 2014). Congruently, Tiu, Masalinto, Bermudo, Cuy, and Yango (2013) ascertain that vastly skilled library professionals are equipped with sufficient knowledge and information concerning their assigned jobs and thus contribute to the growth of the library.

Skilled and vigorous library employees aid the development of the organization, by providing exceptional quality and quantity services to the library users and therefore enhance their work performance (Jain, 2005). Sa'ari (2013) establishes that immensely skilled library professionals can completely and efficiently make use of library websites to promote available library collections and services to attract a wide base of library users so that they can reach their goals and cultivate the library. According to Khan, Masrek and Nadzar (2015) library professionals who possess required skills such as problem or conflict resolution skills can manage or handle different professional issues such as being able to work under pressure, for instance, managing to serve as many clients as possible in a short space of time without any delays, this, therefore, improves their job performance.

# 2.2.4.1.3 Leadership and Motivation and Task Performance

Lee and Hidayat (2018) postulated that the high performance of employees in an organization is greatly affected by factors such as the leadership and motivation of the individual employees. Nguyen, Mai and Huynh (2019) suggested that motivation and leadership have a positive impact on the task performance of employees because they can work more efficiently, hence contributing to enhanced performance. Steinbauer, Renn, Chen, and Rhew (2018) posited that intrinsically motivated employees use self-leadership strategies to a greater degree to improve their job performance. Employees' leadership and motivation skills permit them to perform well the required daily tasks, thus improving their overall work performance (Sumedrea, 2013).

Andressen, Konradt and Neck (2011) propounded that self-leadership enhances employee motivation and employee performance, thus selfleadership acts as a process factor that determines motivation and consequently leads to job performance. According to Inam, Sheikh, Shafqat and Najam (2021) employees with high self-leadership are motivated to attain corporate expectations and goals and improve their performance. Batuk (2021) posits that self-leadership is a process whereby employees motivate themselves to improve their task performance. Carmeli, Meitar and Weisberg (2006) corroborate that employees who possess self-leadership skills motivate themselves to accomplish their tasks and hence improve their performance

Rajathi and Abinaya (2018) affirm that if employees are self-directing and selfmotivated they can lead themselves and become high-performing. Castellano, Chandavimol, Khelladi and Orhan (2021) ascertain that self-leadership motivates employees to accomplish a particular task or mission which increases their job performance. Park, Song and Lim (2016) ascertained that there is a significant and positive impact of self-leadership on work-related outcomes such as employee productivity, proficiency, and performance. Manzoor, Wei and Asif (2021) proposed that the motivation of an employee plays a pivotal role in amplifying his or her productivity and performance.

# 2.2.4.2 Human Capital and Contextual Performance

Ali (2020) stated that human capital motivated employees and boosted their commitment to their work, which in turn enhanced their performance at work. Tastan and Davoudi (2015) indicated that human capital has a positive impact on employee motivation, employee commitment, and overall contextual performance. This is consistent with the findings of Bontis and Serenko (2009) who found significant and positive relationships among human capital, employee commitment, motivation, and overall employee performance.

Bryl (2018) postulated that human capital may also increase employee performance and motivation for work which therefore means employees are more involved in task performance and understand better the vision of the company. Zaharie, Poor, Ratiu and Osoian (2019) indicated that human capital facilitates employees' communication skills and interpersonal skills and ultimately enhances the organizational service quality and accelerates employees' performance.

# 2.2.4.2.1 Training and Education and Contextual Performance

Employees who are trained are prone to pursue perplexing tasks that upgrade and bolster their skills and they are likely to find novel ways of problemsolving, thereby improving their adaptive performance). Furthermore, trained employees tend to increase their commitment to work, and take initiative in learning new tasks, which is useful for increasing dedicative and adaptive performance(Zhang, Zhang & Li, 2018).

Pradhan, Jena and Singh (2017) established that for employees to enhance their adaptability performance they need to learn and master new skills so that they can adjust to the new technology changes related to library and information services which will enable them to finish their tasks, achieve their goals and remain valuable. Additionally, the researchers highlighted that training results in employee performance and organizational development and thus it can be inferred that training strengthens employees coping abilities enabling them to concentrate on solutions so that they can handle uncertain climate demands.

Moreover, library employees who have undergone formal marketing training can overcome the challenges and obstacles that come with the changing needs and demands of library users since they are more receptive to using a variety of techniques to effectively promote the library services and resources such as face-face events, use of social media, library tours, printed guides, etc so that they can widen their customer base and remain competitive and thus enhance their adaptability performance (Yi, 2016). Amoah and Akussah (2012) specify that, for libraries to function effectively and efficiently, and to increase the work performance and the productivity of their employees, library employees need to be constantly trained to cope with the changes of being able to cope to the modern style of arranging library materials and customizing information which matches the needs and the convenience of the library users. Consistently, for library employees to perform their jobs professionally and inhibit the challenges in the execution of their jobs brought up by frequent changes brought up by IT, they need to acquire the necessary skills and competencies needed for contemporary cataloging and classification duties by continuously attending conferences and seminars relevant to their job tasks (Njoku, 2018).

Library professionals must elevate their skills and knowledge which is useful to intensify their adaptive performance, trained personnel are adjustable and extendible to use new technologies and Web-based services to monitor the needs and expectations of library users and to provide increased access to qualitative information services and collections (Baryshev, Verkhovets & Babina, 2017). Also, Chigbu, Njoku and Uzoagba (2016) state that training influences an employee's adaptive performance therefore librarians are encouraged to go for regular training so that they obtain enough internet skills to meet the specialized needs of library users which are achieved by effectively managing open access resources which is a new way of delivering information through virtual journals.

Babayi and Ijantiku (2016) also regarded the training of the un-skilled library personnel as a requirement for the library personnel to catch up with the high and rapid information technology proliferation around the globe. Such knowledge will enhance job performance in line with modern technological trends. Correspondingly, training is pertinent for librarians because it furnishes them with the necessary skills, abilities, and knowledge to cope with the rapidly changing perspectives of users and the development of new technology. Additionally, librarians need to learn new skills and techniques so that they can be adaptable to the complex library environment and the work pressures which results from the hurried change of information (Abotalebi & Biglu, 2017).

Ezeani, Eke and Ugwu (2012) ascertained that for librarians to do their tasks seamlessly, they need to constantly acquire new professional skills and capabilities so that they can assimilate knowledge and understanding of the evolving present-day library trends and do not become outmoded which slows down their performance and service delivery. Consistently, adaptive performance and overall organizational performance is dependable on employees upgrading and expanding their knowledge and skills so that they can be able to adjust to the changes constantly accumulating in the external environment (Ramzan, Danish & Ali, 2016).

Congruently, for effective service delivery, especially in a knowledge-based economy where the needs of patrons keep on fluctuating, libraries are to have competent and eminent staff who are well trained to attend to the needs of their patrons (Amoah, Arthur & Yeboa, 2018). Furthermore, to meet the ever-changing needs of library users, such as the implementation of a 24-hour schedule, library professionals need to be trained so that they are open to change and flexible to work late-night shifts to provide information and services to library users. Consequently, training enables employees to adapt to any organizational transformations which therefore increases employees' adaptive performance (Bowman, 2013).

Training is important for library professionals to meet the diverse needs of their users such as those with a disability they are required to go for disability training awareness so that they know how to approach them effectively, how to teach them to get access to alternative formats materials in their databases and catalogs and how to provide quality information on disability and fiction that portrays disability in an empathetic and understanding way. This, therefore, indicates that training enhances employees' adaptive performance (Murray, 2000).

Furthermore, training is essential for employees so that they are accustomed to how to deal with people with special needs and have knowledge of disability etiquette (Mates, 2009). Congruently, training equips library employees to be more creative, skillful, and attentive so that they are capable of responding to the various needs and feelings of different library users in challenging situations (Madukoma et al., 2014). Bamidele et al. (2013) postulate that adequate training elevates the knowledge of library employees which enables them to troubleshoot and assist users in all areas of service need. Also, training equips employees to have the knowledge, confidence, and expertise to use specialized equipment such as the adaptive technology to perform their jobs successfully such as being able to assist special library users in accessing information in their library databases and catalog, hence training improves the employees' adaptive performance (Mates, 2009).

Hurst (2014) opines that to enhance employee adaptive performance library employees need to acquire training so that they will be able to use new technologies and be able to feel at ease with new devices and therefore respond to the technology needs of users. Similarly, Okiki and Durodolu, (2018, pg.71) proposed that library employees should be exposed to different kinds of training such as workshops and conferences both internal and external to them so that they can obtain critical skills that will give them seamless ability to use modern library facilities without been technophobic and therefore perform their duties thoroughly.

Employees with a high level of educational attainment in Library Sciences are driven to effectually, proficiently, and productively utilize their working hours, they endeavor and make an effort to complete their assignments on time to fulfill the mission of the library. Hence, a high educational qualification in library sciences is necessary in intensifying the job performance of employees (Kont & Jantson, 2013).

Antwi and Bello (1993) stated that trained library professionals are motivated to work hard and are determined to achieve their goals. Trained library professionals are driven to use their attained knowledge to perform maximally which therefore strengthens the development of the library. Consistently, when library professionals are provided with on-the-job or off-the-job training they will be more enthusiastic to perform their tasks and achieve their set goals of the organization (Mayowa-Adebara, 2018). Additionally, training library professionals increase their productivity and work performance, since trained library professionals are keen to work hard so that they can be promoted to a higher position (Bapna et al., 2013). Continuous professional training contributes to adding immense value to library services resulting in increased work performance since training motivates library employees to update their knowledge and skills, while at the same time sustaining their loyalty and commitment to the organization (Warraich & Ameen, 2017).

Library staff exposure to unceasing training stimulates them to be more committed to their jobs which enhances their job performance (Ajegbomogun & Diyaolu, 2018). Congruently, library employees who are retrained or undergo skill development are enthusiastic to go the extra mile to provide quality services to the users and are motivated to work hard to fulfill their organizational mission and vision (Mierke, 2016).

Librarians who are highly trained are motivated and dedicated to accomplishing their tasks and they also make an effort to make sure they contribute to the growth of the library by assisting or training other librarians to provide better and excellent services to users (Akobe, 2019). Library employees who have received on the job training have people skills that increase their contextual work performance since they can work and interact with other colleagues to achieve the shared goal of cataloging and classifying many books insufficient time (Stokes, Schneider & Lyons, 2010)

# 2.2.4.2.2 Experiences and Skills and Contextual Performance

According to Befort and Hattrup (2003), the value of contextual performance in firms is positively connected with employee experience and skills. They explained that employees' experiences and skills prompted them to focus on the social and personal environment of work. Marimuthu, Arokiasamy and Ismail (2009) postulated that individuals with more working experience and skills at work are well equipped in tackling tasks and come up with creative ways of increasing the productivity and growth of the organization, which enhances their contextual performance. Yukl (2002) observed that more experienced employees exhibited greater levels of skills connected to sophisticated social judgment. The author explained that it is predicted that more experienced employees will rate the relevance of contextual behaviors in the organization higher than their less experienced counterparts because with more experience and skills they appear to develop an appreciation of behaviors representing contextual performance via experience.

#### 2.2.4.2.3 Leadership and Motivation and Contextual Performance

According to Husnatarina and Elia (2022), the presence of self-leadership and intrinsic motivation increasingly enables a person to show more good work performance. Additionally, self-leadership and intrinsic motivation increase an employee's drive to look for better ways to do their jobs, which are necessary to produce a good performance. Knotts and Houghton (2021) highlighted that there is a positive association between self-leadership, work engagement, organizational commitment, and employee job performance. The authors suggested that employees who motivate themselves using self-leadership strategies are actively engaged and committed to their work, thereby enhancing their work performance.

Self-leadership generates employees' work engagement, increases employees' commitment, and enhances their overall work performance (Inam et al., 2021). Mo (2021) discovered that leadership influences employees' job performance through organizational commitment. The author explained that employees with high self-leadership would show more commitment to their organization because they focus on the positive side of the work and willingly strive to accomplish their goals.

According to Kuvaas et al. (2017) employee, internal motivation has also been shown to have positive associations with contextual work performance since motivated employees are persistent, energetic, enthusiastic, and more attached to their jobs. Correspondingly, Dysvik and Kuvaas (2011) suggested that motivated employees are more involved, persistent, and interested in their jobs and demonstrate greater goal attainment than those who are less motivated. Additionally, motivated employees produce higher work quality and better work performance. Manzoor et al., (2021) confirmed that motivation results in instant performance and productivity by the employees, and as a result of motivation, employees are self-driven to discharge their duties optimally.

# 2.2.4.3 Human Capital and Adaptive Performance

Human capital equips organizations to be adaptive and to overcome any challenges posed by the environment and hence improve their performance (Okuwa, Nwuche & Anyanwu, 2016). Mitchelle, Boyle and Nicholas (2020) discovered that there is a positive association between human capital and organizational capacity to respond to environmental changes which ultimately leads to an improvement in adaptive performance and overall employee performance. Diaz-Fernandez, Lopez-Cabrales and Valle-Cabrera (2014) proposed that Human capital adds value and improves the performance of the organization if it increases the efficiency of the organization and adapts to the changing needs of the customers.

Roca-Puig et al. (2012) suggested that the human capital pool can improve employee performance through its contribution to employees' flexibility of being able to perform multiple tasks within an organization. Human capital expedites employees' knowledge, and problem-solving skills and enables employees to make effective which leads to positive adaptive performance and also human capital is considered to be the underlying strategic resource for sustainable competitive advantage in today's fast-paced, rapidly changing environment (Wang, Wang & Liang, 2019). Human capital enables employees to perform tasks in highly complex environments which involve high consistent coordination and communication with team members, which leads to increased performance (Urrutia-Badillo, Lopez-Cabrales & Cabrera, 2018).

### 2.2.4.3.1 Training and Education and Adaptive Performance

Employees who are highly educated can accomplish their tasks because they possess the skills and abilities to adapt better to stress which occurs after an organizational change process (Marques-Quinteiro, Ramos-Villagrasa, Passos & Curral, 2015). Similarly, highly qualified library professionals perform their

jobs more efficiently, which in turn makes them more flexible and frees up time to address the problems and exceptions typically occurring during innovation processes (Grabner, Posch & Wabnegg, 2018).

Correspondingly, libraries are interested in qualified professional librarians who are trained, knowledgeable, and skillful to adapt to the frequent changes brought up by IT which enable them to provide prompt and accurate services to library patrons which are vital to increasing their work performance (Nguyen, Nguyen, Locke & Reddy, 2017). Librarians who obtained a library and information science degree can work efficiently and effectively in the constantly changing library environment because they possess discipline-specific knowledge such as knowing how to generate linking data that produces data in digital form. Additionally, they contain knowledge on how to produce content management, recover, disseminate and preserve digital information so that information is easily accessible to users. Additionally for librarians to work successfully in a digital environment they have an in-depth understanding of the user's needs, have detailed knowledge of what kind of needs are essential to users, and knowledge of their available library collections which are satisfactory to the users (Nonthacumjane, 2011).

Similarly, having a qualification in library and information science enables librarians to be operational in the administration of the emerging digital library because they possess trend analysis skills, proper technical skills and knowledge of the digital library environment, and knowledge and experience in information and management of digital information and metadata. Furthermore, librarians need to attain an appropriate educational qualification so that they can be competent in doing their tasks, be leaders in the provision of information and services in the digital setting and thus be able to meet the user's needs (Choi & Rasmussen, 2009).

Libraries focus on recruiting employees who are broadly educated, and who attained a degree in LIS because they are equipped to work in vastly technological settings which thus enables them to successfully perform their jobs in a digital environment (Brostein, 2015). Similarly, a LIS qualification is

important for library employees because it equips them with basic and advanced technical skills to work effectively and proficiently in a digital library which is shown by their ability to provide quality and accurate information and services to users (Singh & Mehra, 2013).

A high academic qualification fosters an employee's adaptive performance therefore, employers are interested in new employees who have a higher education because they are flexible and able to adjust to new organizational changes (Pradhan et al., 2017). Consistently, employees who are highly educated such as those having a master's degree react to the environment and consume information and knowledge more flexibly and rapidly than those who are less educated. Additionally, employees who possess higher levels of education are prone to be prepared to assent to new ideas and acclimatize to changes which therefore enhances their adaptive performance (Tseng et al., 2014).

## 2.2.4.3.2 Experiences and Skills and Adaptive Performance

Some organizations to retain their human Capital prefer younger employees with less working experience because it is assumed that young employees are capable of adapting to rapid changes which are brought about by the unstable global environment and the vibrant corporate environment. Therefore, for organizations to ensure they achieve their goals and remain competitive, in an unstable global and vibrant corporate environment, they attempt to employ young employees who are capable of working well under pressure and who can adjust effortlessly to new technology (Munjuri et al., 2015).

Amaechi et al. (2018) state that for librarians to effectively do their job which entails managing knowledge effectively, warranting effective provision of library services, and meeting users changing information interests, they need to be armed with competent and specialized skills, which will also prepare them to withstand the challenges brought up by the unstable environment in which they work in. Highly skilled library professionals can cope with different needs and attitudes of users such as handling impolite users and receiving difficult queries and therefore execute their jobs efficiently. Additionally, for library professionals to perform their jobs successfully and buffer the challenges which occur from the library reference service requires them to possess higher skills so that they will be able to balance many tasks, think rapidly, manage time effectually, and be adaptable and composed when dealing with hard situations (Luo, 2008).

Congruently, library professionals who possess higher skills can multitask, they are not limited to one task of assisting users with their research queries but are also active marketers of the library products and services so that they can attract more clients. Therefore, librarians' skills and their ability to multitask enable them to perform their jobs efficiently and cope with the challenges brought up by technological changes (Tanawade, 2011). Akobe (2019) agrees with the above statement by stating that for librarians to cope with the anticipated changes brought about by the Information age and to perform their duties successfully, librarians are expected to be adaptable and possess multiple skills which will enable them to work in diverse areas in the library.

Missingham (2006) affirms that for librarians to perform well in their jobs, they need to be multi-skilled with a comprehensive set of library and information management skills. Additionally, librarians with multiple skills conduct their jobs efficiently, because they are tactical thinkers who are completely able to understand the overall vision and mission of the library and the setting within which their library operates. Additionally, librarians who possess multiple skills such as being adjustable, flexible, risk-taking, being able, and able to embrace innovation can enhance their work performance and boost the overall performance of the organization.

Emezie and Nwaohiori (2013) mentioned that librarians who have insufficient technological skills and competencies are unenthusiastic about the use of new technologies and they regard the use of computers in library work as an abnormality. Therefore, the negative attitude of librarians towards the new technology has negative effects on the nature and quantity of services they provide to users which thus cripples their performance. Consistently, Anyira

(2011) states that librarians with underdeveloped technological skills are not capable of rendering effectual library services, hence, inadequate skills among librarians create a serious hindrance to providing services and products which meet up with the expectations of the users.

## 2.2.4.3.3 Leadership and Motivation and Adaptive Performance

Marques-Quinteiro, Vargas, Eifler and Curral (2019) and Chien et al. (2020) found that individual adaptive performance can be enhanced through self-leadership and motivation in rapid change and unpredictable work environments. Similarly, Ho and Nesbit (2014) confirmed that employees with high levels of capacity and skills in self-leadership face competing tasks and work activities. Employees who got specific training in self-leadership and motivation thinking pattern tactics not only performed better than those who did not, but also transitioned better to organizational post-change events (Marques-Quinteiro & Curral, 2012).

Griffin, Parker and Mason (2010) believe that a leader's vision and motivation provide a conducive environment for increasing adaptive behavior and performance. Bande, Fernandez-Ferrin, Varela-Neira and Otero-Neira (2016) posit that leadership improves employee adaptability by increasing selfefficacy and intrinsic motivation. Therefore, employees who are intrinsically motivated and have self-leadership skills are motivated to engage in adaptive behaviors because of a desire to be creative and to acquire new skills on the job. Rambe, Modise and Chipunza (2018) emphasized that a combination of self-leadership and intrinsic motivation is critical in achieving high job performance for employees through increased proficiency, adaptation, and ability to multitask in an organization

Charbonner-Voirin, Akremi and Vandenberghe (2010) proposed that individual adaptive performance is linked to intrinsic drive and self-leadership. Employees who are intrinsically motivated and have self-leadership skills are less likely to suffer negative feelings that commonly accompany changing, stressful, and flexible work environments, according to the researchers. Leadership has a significant impact on employee motivation and adaptive performance, according to Kaltiainen and Hakanen (2022), because leadership behaviors may help employees not only perform better in their tasks but also effectively manage stress, take appropriate actions, develop new ideas, and take into account others when respond to new organizational circumstances.

## 2.2.5 Human Capital and Innovation Capability

According to the resource-based view, employees with distinctive and extraordinary human capital are positively associated with an organization's innovation capabilities, since they add to the discovery of novel market opportunities, and employees with such human capital are open to experimentation and implementation of diverse processes. These employees are also the most adaptable in developing new skills, which increases the organization's innovativeness (Cabello-Medina, Lopez-Cabreles, and Valle-Cabrera 2011).

Dabic, Laznjak, Smallbone and Svarc (2018) emphasized that human capital, which includes employee knowledge, is an extremely crucial determinant of an organization's innovation capacities. Correspondingly, the human capital characteristics of employees and managers which comprises qualifications, skills, experience, and expertise are among the most important factors of innovation activities in organizations (Chabbouh & Boujelbene, 2020). Human capital is essential for innovation since it is people who can challenge the status quo, come up with new ideas, and master new skills on the fly (Andreeva, Garanina, Saenz, Arambaru and Kianto (2021).

Sa'ari, Idrus, and Jaafer (2016) pointed out that, for organizations to innovate and be effective in administering innovation, they must depend on their human capital to deliver their methods, strategies, and processes. Liu, Pang, and Kong (2017) stressed that human capital is critical for innovation since it serves as a conduit for knowledge and technology acquisition. According to Farace and Mazzotta (2015) and Ostergaard, Timmermans, and Kristinsson (2011), human capital features, such as experience, training, and education level significantly raise the inclination of employees to innovate in an organization. Dakhli and De Clercq (2004) reported that human capital that integrates employees' work experiences, professional skills, and leadership skills is the driving force behind the organization's innovation activities. Also, Omerzel and Jordana (2016) found that if an organization has high-quality human capital comprised of employees who are intelligent, specialists, and capable of establishing novel ideas and strategies, the more likely the organization can innovate. Furthermore, Bornay-Barrachina, De la Rosa-Navarro, López-Cabrales and Valle-Cabrera (2012) affirmed that human capital is an essential foundation for innovation because the knowledge possessed by an organization's employees is tightly linked to its products and services. Thus it is evident that an organization's capacity to develop new products is inseparably associated with its human capital.

According to Yen (2013), an organization with a higher degree of human capital is better able to develop new information, which leads to employees being better able to absorb, transform, and apply the new knowledge, resulting in more innovations. This is in line with the study of Basta (2009) who considered human capital as a vital source for innovation and product development in an organization. This is consistent with the findings of Razavi, Tablepour, Azimzadeh and Mohammadkazemi (2019) who found that employees with higher levels of human capital such as higher knowledge, education, and experience can transfer their skills, expertise, knowledge, and experiences to enhance organizational innovation and or product development.

Beltramino, Garcia-Perez-de-Lema and Valdez-Juarez (2020) regard human capital as a critical component of innovation. Its significance stems from the fact that firms with high levels of knowledge, skills, and experiences have more flexibility in obtaining new knowledge and a stronger potential to innovate. According to Wu, Lin and Hsu (2008) the more human capital there is, the more chances there are to exchange and combine the knowledge. As a result, as knowledge grows, so does the ability for innovation in an organization.

Qian and Huan (2017) found that human capital-rich organizations can provide innovative ideas, improve business processes, and respond quickly to problems

or clients. This indicates that an organization with more human capital can improve its ability to innovate. Ali, Hussin, Haddad, Alkhodarg and Mare (2021) posited that employees' experience, expertise, and abilities are required for the current fast-paced and changing corporate environment, making human capital a critical component of innovative performance.

However, according to Bekana (2019), the impact of human capital on innovation has been examined sparingly in developing nations, particularly in Africa, with the majority of credible research undertaken in developed countries. As a result of the scarcity of research on this topic, this study intends to fill the void by examining the impact of human capital on innovation capabilities in academic libraries in Southern Africa, specifically in Namibia, South Africa, and Zimbabwe.

#### 2.2.5.1 Human Capital and Service and Technological Innovation

Peng, Tan and Zhang (2020) reported that employee human capital is linked to improving existing services in an organization. Costa, Fernandez and Dorrego (2017) ascertained that human capital traits of employees and managers such as their education, experiences, training, attitudes, and leadership skills are critical variables that enable service innovation and technological innovation capabilities in an organization.

According to Diaz-Fernandez et al. (2014) employees can use human capital to create new services and technology, which they can then use to provide answers to changing and uncertain circumstances. Hsu and Fang (2009) propounded that an organization with greater human capital has more innovative capability to improve its new service creation performance because employees with more human capital can fully utilize their skills and abilities. Tsou and Chen (2020) pointed out that service innovation value can be created by remodeling or creatively leveraging human capital resources and competencies.

# 2.2.5.1.1 Training and Education and Service and Technological Innovation

According to an endogenous growth theory by Nelson and Phelps (1966) training employees accelerates the generation and dissemination of technological innovation. Teslenko, Menlikov and Bazin (2021) posited that employee vocational education and training programs are critical for the development of innovative products and services in an organization. Mumford (2000) recommends that an organization must restructure training activities in ways that create new knowledge and new opinions. Therefore, training in fundamental skills is important for technological innovation.

The findings of Hsu and Fang (2009) ascertained that the process of technological innovation requires employees to continuously learn new knowledge and technology. Aminullah, Hermawati, Fizzanty, and Soesanto (2017) agree with the preceding statement, stating that the process of service innovation may be maintained through frequent training, knowledge improvement, and skill-enhancing, all of which can be accomplished by improving employees' education.

Delgado (2011) found that investment in human capital such as training has a positive relationship with technological innovation, deducing that employee training plays a vital position within the establishment of technological innovation. Farace and Mazotta (2015) found that service innovation probability increases if an organization continuously invests in employees' professional training. Prajogo and Oke (2016) postulated that to improve service innovation in an organization it is important to harness and leverage the human capital of employees through training.

Aminullah, Hermawati, Fizzanty and Soesanto (2017, pg. 285) found that service innovation can be administered by investing in human capital through regular training and upgrading of knowledge. Söllner (2010) observes a positive and significant effect of the share of high-qualified workers on the likelihood to innovate. Wadhwa, Mc Cormick and Musteen (2017) found that employees with higher levels of education have more knowledge and skills which increases their capability to develop new technology. Li and Yu (2018) found that employees with a higher level of education are more knowledgeable in making good decisions which could lead to a successful operation of technological innovation. Similarly, Capozza and Divella (2019) discovered that employees' general knowledge from tertiary education is important for the introduction of new services, particularly if they contain radically new technologies.

Nazarov and Akhmedjonov (2012) showed employees with a higher level of education such as holding a university degree do not significantly improve organizations' ability to introduce new services and technologies because according to the authors, most innovation in emerging economies is based on absorbing rather than inventing new technologies, individuals with more firm-specific technical skills are required rather than those with general (academic) knowledge.

### 2.2.5.1.2 Experience and Skills and Service and Technological Innovation

Tsou and Chen (2020) observed that employees who have greater work experiences focus on more novel aspects of their jobs, such as attending to unique customer needs or solving new problems, which leads to distinctive innovation practices. According to Castro, Delgado-Verde, Amores-Salvado, and Navas-Lopez (2013) greatly experienced and skilled employees are significant sources in getting high levels of service and technological innovations in technology-based enterprises.

D'Este, Rentocchini and Vega-Jurado (2014) mentioned that organizations with a high number of highly skilled personnel are more likely to be able to construct wider professional and social networks, as well as implement learning processes and search tactics that allow for the identification of fresh alternatives and approaches to produce new goods or processes. In contrast, Capozza and Divella (2019) found that managerial specific knowledge and expertise gained via prior work experience in the same industry appears to be ineffective in easing the introduction of new services and technologies because according to the authors, experienced managers, according to their findings, maybe more risk cautious when it comes to innovation decisions.

Correspondingly, Vinding (2006) identified that managerial experience, as well as that of department heads and workers at the managerial level, has no discernible effect on the degree of technological innovation ability in an organization. One explanation could be that younger individuals are educated with the most up-to-date knowledge of technology and managerial methods, but older people are less up-to-date, i.e. unaware of the latest information technology benefits.

De Winne and Sels (2010) found that the industry experience of owners/managers has a negative effect on service innovation in start-up organizations. This could be attributed to the fact that experienced owners or managers are vulnerable because they may unintentionally stick to industry-accepted working practices and are less able to grasp new ideas. Lynskey (2004) argued that employees' unique set of skills, work experience, openness to fresh ideas, and opportunity recognition abilities are all required aspects for service innovation in an organization. opinions. According to Agostini, Nosella and Fillippini (2017), if an organization expects to have greater new service development performance, it must hire skilled people and experienced managers because "its employees can bring talents and capabilities into full place."

# 2.2.5.1.3 Leadership and Motivation and Service and Technological Innovation

Alblooshi, Shamsuzzaman and Haridy (2020) consider leadership and motivation as important determinants of service and technology innovation in service organizations. Leadership and employees' intrinsic motivation promote service innovation in an organization (Chang, Bai & Li, 2015). Li and Hsu (2016) ascertain that leadership fosters employees' motivation to innovate in services. Al-edenat (2017) propounded that leadership attributes such as self-motivation permit employees with more opportunities to become critical in rethinking issues and the way of solving them, this allows the employees to be more innovative and generate new ideas which result in new products and services.

Nusair, Ababneh and Bae (2012) argue that leadership heightens employees' motivation which in turn is prone to enhance service and product innovation in organizations. Hoang et al. (2022) postulate that leadership and motivation are crucial elements that bolster employees' service innovation Silva, Jardon and Maria (2021) assert that human capital dimensions such as leadership and motivation have a positive, significant, and direct impact on service innovation capabilities in an organization.

Marvel and Patel (2017) highlight self-leadership as an important motivational resource for speeding service development in the new technology-based venture context. Dulaimi, Ling and Bajracharya (2003) point out that successful technological and service innovation in an organization is dependent on effective leadership and high intra-organizational motivation.

Pasamar et al. (2019) indicated that human capital attributes of employees such as leadership skills and motivation skills contribute to the generation and implementation of ideas that lead to service innovation in an organization. Kayhan and Emma (2019) suggested that human-related stimuli such as leadership and intrinsic motivation are critical elements in ensuring the success of service innovation.

#### 2.2.5.2 Human Capital and Organizational Innovation

According to Tsou, Chen and Liao (2016), human capital is a primary source for innovation activities in an organization. Nguyen (2018) affirmed that one of the major influences on organizational innovation is the quality of human capital in terms of richness and range of knowledge, experiences, and skills. As a result, individual knowledge promotes organizational innovation. Correspondingly, Lopez-Garcia and Montero (2016) reported that an organization's knowledge, which is crucial for innovation activities, is entrenched in its human capital.

Dakhli and De Clercq (2004) indicated that human capital has a positive effect on organizational innovation, which means that the better the human capital within an organization, the higher the innovation performance. Huang, Leone, Capruscio and Kraus (2020) stated that human capital is a triggering component in innovation, and most organizational-level innovation instances show that it plays a role in the generation, adoption, and spread of technical and organizational change. Arvanitis, Loukis and Diamantopoulou (2016) found out that human capital has no substantial relationship with Greek organizations' innovation activities, which might be viewed as another indicator of the country's relative innovation backwardness. In contrast, Taggar (2002) found that employees with high-quality human capital such as valuable knowledge lead to excellent organizational innovative capabilities because they contribute to identifying new market opportunities, and employees with such knowledge are willing to experiment and apply new procedures.

## 2.2.5.2.1 Training and Education and Organizational Innovation

Human capital theorists emphasize that human capital leads to value creation in an organization because an increment in employees' skills, knowledge, and abilities acquired through training and education most probably translates into enhanced organizational innovation capability (Becker, 1964). Employees who are offered training and learning opportunities in an organization are likely to develop innovation capability skills which lead to innovation in an organization (Altindag, Finbas & Wu, 2019).

Employees can gain skills and knowledge through training, which improves an organization's potential to innovate. Also, an organization with a particular number of educated employees is better equipped to absorb, transform, and utilize external knowledge from suppliers, suppliers and competitors, resulting in more innovation (Van Uden, Knoben & Vermeulen, 2017). According to Liu et al. (2017), highly educated personnel or employees with a high degree of human capital have a bigger knowledge base and a greater intellectual capacity to learn and accumulate new information. As a result, highly educated individuals are better at absorbing and integrating technology, spreading knowledge, and developing new procedures and production methods, resulting in a more innovative organization.

According to Smith and Hitt (2005) and Vinding (2006), there is a positive association between the educational level of employees and organizational innovativeness. Therefore, a higher level of education has shown its ability to enhance the innovativeness of an organization. Similarly, Ramirez, Gallego and Tamego (2020) postulated that postgraduate workers with a Master or a Ph.D. degree are important for the innovation process and innovation outcomes in an organization. Sun (2021) pointed out that highly educated human capital can boost an organization's ability to innovate by allowing for more learning by doing. Furthermore, highly educated human capital complements an organization's research and development efforts and can aid in pushing the company's innovation frontiers.

Consequently, Leiponen (2005) proved that highly educated personnel assist the processes of synthesizing and subsequently commercializing knowledge from both internal and external sources, making them an enabler for organizational innovation. The study by Nguyen (2018) shows that attracting and maintaining bright people with superior expertise gained through education and training has significant benefits for organizations in terms of increased innovation.

#### 2.2.5.2.2 Experience and Skills and Organizational Innovation

Employees who possess higher skills initiate changes in production and service delivery methods; and they improve the links between managers, customers, and suppliers (Lerro, Linzalone, & Schiuma, 2009). Organizational innovation is positively affected by employees' skills and competencies (Abbas, 2016, pg.54). Dakhli and De Clercq (2004) mentioned that human capital which incorporates employees' work experiences and professional skills are driving force for innovation activities in an organization.

Pradana, Perez-Luno and Fuentes-Blasco (2020) posited that employees with skills and knowledge are needed by organizations seeking to innovate to produce fresh concepts. As a result, organizations require skilled and innovative individuals who are prepared to use new knowledge and experiment to accomplish such innovations. Correspondingly, Bornay-Barrachina, Lopez-

Cabrales and Valle-Cabrera (2017) found that employees' experiences and skills in an organization enable them to establish novel ideas and bring about innovations. Kianto, Saenz and Aramburu (2017) assert that employees' skills and experiences are major determinants of organizational innovation. Employees with advanced skills are more prone to come up with fresh and unique ideas. This supports the findings of Cabello-Medina et al. (2011), Al-Dujaili (2012), and Nanggong and Indarti (2016), who found that human capital aspects of employees such as skills and experiences have a positive effect on organizational innovation.

Tsou, Chen and Liao (2016) stated that new ideas and innovativeness in an organization are facilitated by employees and managers who possess higher human capital such as professional knowledge, plentiful experience, and outstanding capabilities. Tushman and Anderson (1986) ascertained that skilled and intelligent employees in an organization are prone to question common norms in organizations and find new ways of solving problems in an organization. Tseng et al. (2014) affirmed that organizations with highly skilled and knowledgeable employees have higher levels of human capital and make correct decisions, resulting in enhanced organizational innovation.

Correspondingly, Donate, Pena and Pablo (2016) ascertained that highly skilled employees are likely to learn faster and take more creative decisions, hence resulting in better organizational innovativeness. Snell and Dean (1992) established that experienced and skilled human capital provides the foundation for all organizational innovation procedures. This kind of human capital provides the principal source for creating novel ideas and knowledge.

Human capital with experience, talent, and expertise is the primary source of new ideas and knowledge, and it is critical for organizational innovation outcomes. Furthermore, innovation may necessitate specialized knowledge, skills, and experiences that are embedded in persons and their human capital (Mahoney & Kor, 2015). Contrary, Dost, Badir, Ali and Tariq (2016) found that human capital had no discernible impact on the development of new ideas. One probable cause is that people's experiences, skills, expertise, and linked human capital are not conducive to innovation generation.

#### 2.2.5.2.3 Leadership and Motivation and Organizational Innovation

Carmeli et al. (2006) postulate that self-leadership and self-motivation skills are critical for displaying innovative behaviors among employees in an organization. Likewise, Miao, Newman, Schwarz, and Cooper (2017) state that the leadership and motivation of employees shape employees' innovative behavior in an organization. Ghosh (2015) confirms that self-leadership and motivation are significant antecedents factors that positively affect employees' innovative behaviors in an organization. Marvel and Patel (2018) posit that self-direction and self-motivation are valuable resources in accelerating radically new products in an organization. DiLiello and Houghton (2006) suggest that strong self-leaders and self-motivators are more likely to have higher levels of innovation than weak self-leaders and self-motivators.

Qaiser, Hassan, Ghias and Rasool (2020) indicated that self-leadership is a powerful tool of motivation and it helps the employees to portray innovative work behavior in an organization. Curral and Marques-Quinteiro (2009) suggest that enhancing employees' self-leadership and intrinsic motivation skills might be an avenue for enhancing their innovative behavior in an organization According to the authors, Intrinsically motivated employees are encouraged to develop their self-leadership skills to build their innovative capabilities so that they will be able to improve their work. Hence, intrinsic motivation and self-leadership enable employees to look for novel ways of doing their jobs effectively and efficiently.

Omar and Mahmud (2015) corroborated that self-leadership strategies influenced an individual innovative behavior in an organization by the application of behavioral, cognitive, and intrinsic motivation approaches. Innovative behaviors among employees in an organization are stimulated when employees can motivate and lead themselves to achieve higher levels of performance and effectiveness (Gomes, Curral & Caetano, 2015). Dai (2019) confirmed that leadership effectively promotes employees' innovative behavior

and work motivation plays a partial intermediary role. Mokhber, Khairuzzaman and Vakilbashi (2018) affirmed that leadership influences organizational innovation by enhancing employees' motivation to be creative and innovative.

## 2.2.5.3 Human Capital and Marketing Innovation

Employee human capital is a stimulating component that drives marketing innovation, according to Pater & Lewandowska (2015). An organization's marketing innovation potential is primarily reliant on its human capital. This indicates that the greater the number of employees who are innovative, brilliant, experts, and capable of developing new ideas and knowledge, the more capable the company is (Omerzel & Jurdana, 2016). Marketing innovation in the form of new market services can be developed by repurposing or creatively leveraging human capital resources and competencies (Tsou & Chen, 2020).

Van Uden et al. (2017) suggested that formal training and schooling, as well as other human capital strategies, are critical to a company's marketing innovation. They stated that human capital techniques enable employees to develop a new product to satisfy market demand, develop a new product to fulfill an unmet market need, improve on an existing product to meet a market need, or develop a method to help them reach the market more effectively.

#### 2.2.5.3.1 Training and Education and Marketing Innovation

Capozza and Divella (2019) found that training and education are positively and significantly associated with marketing innovation. The authors explained that employees' educational attainment, as well as their technical and firmspecific knowledge and skills acquired through on-the-job training, are highly linked to the likelihood that organizations would implement marketing innovations. Likewise, Abdullah, Ping, Wahab and Shamsuddin (2014) found that marketing innovation, for example, is inextricably linked to training and ongoing education. Ma, Zhai, Zhong and Zhang (2019) posited that employee knowledge and creativity increase as a result of training and education, and this, in turn, adds to marketing innovation. Smith, Courvisanos and Tuck (2011) believe that training and education are important since they appear to create the necessary knowledge and abilities at an individual level, resulting in higher levels of marketing innovation. In contrast, Matthies, Haverkamp, Thoma and Bizer (2021) found that the impact of occupational training and continuous learning on radical market-shaping breakthroughs is negligible

## 2.2.5.3.2 Experience and Skills and Marketing Innovation

Human capital, as measured by the work experience and strategic management skills of senior executives, has a greater impact on market innovation (Kwan and Chiu, 2015). De Winne and Sels (2010) established a positive relationship between a variety of qualities of small business owners and employees, such as job experience and work skills in relevant industries, as well as new market development. Human capital, both skilled and experienced, has an impact on an organization's ability to produce new knowledge and establish new markets to meet changing market demands (Yen, 2013).

Jan, Shah and Khan (2014) propounded that organizations that invest in highly skilled and experienced human resources are more likely to generate knowledge and make excellent judgments. As a result, the organization's innovativeness improves, and new and better products or services are introduced to the market. Marvel, Wolfe and Kuvatko (2020) showed how an employee's prior experience and expertise with customer problems, existing markets, and ways to satisfy them limited their ability to uncover new market possibilities.

## 2.2.5.3.3 Leadership and Motivation and Marketing Innovation

Marketing innovation is influenced by self-leadership and motivation (Afriyie, Du & Musah, 2019). According to Andrews and Smith (1996), motivational elements such as intrinsic motivation and self-leadership influence marketing innovativeness. The authors further highlighted that the more intrinsic motivation and leadership a product manager has in developing a marketing strategy, the more innovative the marketing program will be.

Chang, Bai and Li (2015) postulated that leadership and motivation allow employees to participate in product marketing innovation because it nurtures employees' dedication to the organization's long-term objectives, mission, and vision. Hence, according to the authors, employees are naturally motivated to support the organization's marketing innovation plans through their inventiveness. Furthermore, according to Chang et al. (2015), great employee motivation and leadership help organizations improve marketing innovation tactics such as outstanding new product design features and functionalities.

## 2.2.6 Innovation Capability and Employee Job Performance

The resource-based view considers innovation capabilities as outstanding, hard to imitate, and worthy resources that boost performance in an organization (Ahmed, Najmi, and Ikram 2020; Gurlek 2020). Correspondingly, resource-based view researchers, have argued for the creation of a distinguished, remarkable, and new product to get a competitive advantage in the market and, as a result, excellent performance (Atuahene-Gima and Ko, 2001; and Harmancioglu, Droge, and Calantone, 2009).

Sadikoglu and Zehir (2010) discovered that employee innovation in the form of new ideas would enhance the production of quality products and services and would also increase customer satisfaction in an organization and therefore increase the overall work performance of the employees. Obeng and Boachie (2018) found that organizations with the propensity to innovate enable employees to perform their duties, efficiently and successfully, thereby increasing their productivity and ultimately enhancing their work performance.

Obeng and Mkzhize (2017) alluded that an organization's innovative capacity increases employees' efficiency and productivity, which is illustrated by their ability to conduct tasks on time and to swiftly respond to the expectations and demands of customers. Walker, Damanpour, and Devece (2011, pg.371) noted that innovation enables employees to effectively and efficiently manage their

work and achieve better performance. According to Garcia-Morales, Ruiz-Moreno, and Llorens-Motes (2007, pg.537) an organization with higher innovation capability results in greater performance since employees are more adaptable to environmental changes and can still perform their work efficiently regardless of the environmental changes.

Tierney and Farmer (2002) revealed that employees who can innovate in an organization can perform better with more efficient methods and ways that would ultimately lead to the overall development of the organization. Nonetheless, as mentioned by Mabenge, Ngorora-Madzimure, and Makanyeza (2020) the relationship between innovation capability and employee performance is not fully exploited by organizations in developing countries, particularly in Southern Africa, most supporting evidence is derived from studies from developed countries. As a result, they advocated for more research into these associations. Based on this context, this research was conducted to examine the relationships in Southern Africa, particularly, in Namibia, South Africa, and Zimbabwe, particularly in libraries, where research is scarce in this area.

#### **2.2.6.1 Innovation Capability and Task Performance**

Wiwoho, Suroso and Wulandari (2020) assert that service innovation affects all functional and operational areas as well as the task performance of businesses, resulting in a significant reduction in the complexity of manufacturing procedures. According to Azubuike, (2013) the significant and positive association between service innovation and task performance results in improved efficiency, potential, product quality, increased competitiveness, and improved business.

Zulfiqar, Hongyi and Murad (2017) stated that service innovation capability has a positive effect on the task performance of employees. They argued that the liberalization of the financial services sector in Ghana helped the task performance of employees to increase. For instance, the transformation from manual deposit and withdrawal to an automated approach not only enhanced the performance of teller attendants but also increased the number of customers. This is because every customer desires stress-free banking activities, and immediately this service innovation capability became the highest priority of the banking sector, and then the task performance was automatically improved.

Similarly, Foroudi, Jin, Gupta, Melewar and Foroudi (2016) noted that the innovation capability of Jumia and Konga in Nigeria not only improved the task performance of its suppliers to a large extent but also diverted the attention of more consumers to the online store. This explains that the innovation capability in the Banking sector in Ghana and the innovation capability of Jumia and Konga in Nigeria have significantly enhanced task performances in both countries and this is because the companies in Both countries (Nigeria and Ghana) have adopted fresh ideas and turn them into new or enhanced products, services, or processes that benefit the company. This is why the ability to continuously alter information and ideas into new products, processes, and structures for the advantage of the organization as well as its investors is referred to as a firm's innovation capability.

Chang, Linton and Chen (2012) postulated that innovation capabilities among employees in telecom industries are responsible for the vital competency in their tasks. This is why telecom organizations have been able to ensure efficient and effective use of their existing resources as well as the various abilities of all of their employees to add more value to their products. According to the current literature, innovation capability could be said to have helped the service industry around the globe to gain more and better competitive advantages, higher performance, maximize resource productivity, and use more efficiently the resources used in the innovation of their product and services (Cohen & Caner, 2016).

## 2.2.6.1.1 Service and Technological Innovation and Task Performance

Service and technological innovation capability help employees attain their goals, produce quality products, and enhance organizational technical operations According to Ndesaulwa and Kiikula (2016), employees' proclivity for new ideas, innovation, experimentation, and creativeness give rise to new

services or technology processes, which have a significant impact on organizational performance (Chege, Wang & Suntu, 2020).

Service innovation affects employee task performance through the improvement of service quality (Lin, 2013). Bhat and Sharma (2020) state that service innovation improves employees' task performance which is reflected by their ability to produce quality and quantity of work, their full attendance on the job, and the competence and usefulness of work completed.

Nassimbeni (2001) asserted that firms must constantly generate new services to sustain or improve their performance and that this requires well-developed technological and service innovation capabilities. Nandakumar (2011) mentioned that for organizations to improve their performance and remain competitive, their task is to continuously provide enhanced or wholly new services to their clients. Due to technological advancements, the UK's services industry increased at its quickest rate in 17 months in December 2017, and this development not only influenced the organizations' task performances but also created prospects for a robust economy (Wiwoho et al., 2020). However, according to Baba (2012), service and technology innovation has no substantial impact on a service sector's effectiveness and performance.

According to Kim et al. (2012), businesses such as banks, hotels, and transportation have effectively leveraged the benefits of service and technical innovation capability, which has helped to increase their employees' task performance and productivity to a considerable extent. According to Purcarea, Espinosa, and Apetrei (2013), service innovation improves employee and organizational task performance. They discovered in their research that the transition of Toyota from manual to automatic has been stated to improve not only the task performance of staff but also the car itself and that this has boosted the influx of consumers' distraction to the product to a considerable amount.

### 2.2.6.1.2 Organizational Innovation and Task Performance

Organizational innovation which involves changes or improvements in organizational techniques/methods is likely to increase the efficiency and quality of operations and therefore enhance employees' task performance in an organization. Furthermore, organizational innovation enables organizations to be more efficient in conducting their tasks and producing high-quality products (Makanyeza & Dzvuke, 2015). Tuan, Nhan, Giang and Ngoc (2016) postulated that for organizations to improve the way they execute their tasks, they should concentrate on organizational innovation activities.

Abdi and Ali (2013) affirmed that organizational innovation has a greater impact on employees' skills, productivity and efficiency, and overall performance of employees. Hence, organizational innovation improves the way employees discharge their duties and responsibilities. Correspondingly, organizational innovations are innovations involving changes in the routines of firms aiming at improving the efficiency, flexibility, creativity, and productivity of employees when performing their duties (Tavassoli & Karlsson, 2016). Similarly, organizational innovations affect employee task performance in terms of productivity, lead times, quality, and adjustability (Saunilla, 2017).

Imani, Foroudi, Seyyedamiri and Dehghani (2020) posited that the level of employees' task performance in an organization is determined by employees' ability to develop new ideas, views, and beliefs. González Miereset al. (2012) maintain that using organizational innovation in an organization affects employees' behavior and involves them in the innovation process and business growth, which therefore improves their task performance.

Organizational innovativeness is a critical determining factor of an organization's task performance, and organizational task performance can be improved by technical and administrative innovation. Previous research has looked into the effects of innovations on organizational performance, and it has been discovered that innovative organizations are necessary for improving performance and increasing the organization's worth (Wiwoho et al., 2020). Correspondingly, organizations that innovate have been found to have greater

levels of productivity and effectiveness and raise their organization value than non-innovating organizations (Gunday, Ulusoy, Kilic, and Alkpan, 2011).

#### 2.2.6.1.3 Marketing Innovation and Task Performance

Marketing innovation permits employees to increase their effectiveness, productiveness and meet customer demands and expectations of goods, and ultimately enhance their task performance (Tavassoli & Karlsson, 2016). Marketing innovation in an organization strives to better answer customer requirements, open up new markets, and reposition an organization's product on the market, all to increase sales, competitive advantage, and gain exceptional performance (Long, 2011).

Marketing innovations, according to Gunday et al. (2011) are critical to an organization's effectiveness and performance. Likewise, Ul Hassan, Shaukat, Nawaz and Naz (2013) proposed that to increase efficiency and success in their business, organizations innovate their marketing strategies. Furthermore, Garcia-Zamora, Gonzalez-Benito and Munoz-Gallego (2013) revealed that organizations benefit from marketing innovation because it produces greater results and provides the best performance. Laforet (2011) posited that for an organization to be successful, remain competitive, and improve its performance it must continuously engage in marketing innovation. Al-Ansari, Pervan and Xu (2013) opined that marketing innovation allows organizations to efficiently solve problems, fulfill the needs of customers and enhance their performance.

## 2.2.6.2 Innovation Capability and Contextual Performance

Xerri and Brunetto (2013) pointed out that effective facilitation of employees' innovative behavior contributes to the development of employees' extra-role behavior, increases employees' commitment and dedication to their organization, and enhances employees' ability to share information and knowledge among coworkers and hence improves employees contextual performance. Harari, Reaves and Viswesvaran (2016) posited that contextual performance which is characterized by good interpersonal relationships among

employees, cooperating, and helping others is determined by employees' innovative behavior.

Wojtczuk-Turek and Turek (2015) postulated that Innovation fosters employees' contextual performance, which is reflected by employees' willingness to help others and create a welcoming atmosphere, as well as civility, generosity, and support for the organization and coworkers. Yan and Yan (2013) found that innovation behaviors of employees contribute to employees' contextual performance which includes cooperating with others, safeguarding the organization, volunteering constructive ideas, self-training, and maintaining a favorable attitude toward the organization.

Khaola and Sephelane (2013) revealed that contextual performance and innovation were substantially connected. According to the authors, this is unsurprising, given that both behaviors are classified as discretionary extrarole behaviors and are multi-dimensional constructs. Naqshbandi, Singh and Ma (2016) posited that employees who demonstrate strong contextual performance, such as adaptability to environmental changes, willingness to take on new duties, and willingness to learn new skills, are predictors of innovation. This differs from the findings of Yi (2006) who found no significant and positive relationship between innovation capability and employee contextual performance.

Zuo, Tiantian, Majid, Guangyu and Yang (2021) discovered a strong and positive relationship between innovation and contextual performance, implying that improving innovativeness is sufficient to increase contextual performance. This led to the realization that, in today's competitive business market, an organization cannot expect customers to remain satisfied and loyal to the organization unless they are regularly provided with innovative products; thus, the burden of remaining associated with the company does not fall on the customers, but rather on the organization.

### 2.2.6.2.1 Service and Technological Innovation and Contextual Performance

Nandakumar (2011) found out that there is a significant relationship between service and technological innovation capability and contextual performance, and this relationship has been evident in employees' receptiveness, perception, and satisfaction derived from a commitment to organizational tasks. Service and technological innovation, according to Osman, Shariff, and Lajin (2015), inspires and facilitates employees to do their jobs diligently and efficiently, as well as making them feel proud of their work. Ramdhan, Ridwan, Majid, Ceilendra, Firdaus, and Firmansuyah (2021) discovered a substantial and favorable relationship between service innovation and contextual performance. This indicates that as service innovation declines, so does contextual performance, and as service innovation declines, so does contextual performance.

## 2.2.6.2.2 Organizational Innovation and Contextual Performance

Chang, Hu, and Keliw (2021) discovered that contextual performance, which consists of employees' goals that overlap or are identical to those of the firm, encourages employees to be innovative and inventive. Putri, Udin and Djastuti (2019) found that organizational innovation is significantly and positively connected with contextual performance. They explained that organizational innovation encourages employees to take on more important obligations beyond their typical jobs and take initiative to give the greatest services to clients. Naqshbandi and Kaur (2011) propounded that employees' contextual performance is aided by innovation, which allows them to go the additional mile by undertaking spontaneous behaviors that go beyond their job prescriptions to guarantee organizational success.

Hwang and Choi (2017) posited that Innovation in organizations fosters helping behaviors, as well as a strong sense of belonging to the organization and a commitment to innovation processes which may induce contextual performance. Arranz, Arroyabe, Li and de Arroyabe (2019) pointed out that organizations implementing organizational innovation showed improved performance which was highlighted by an increase in employee commitment, dedication, and efficiency when doing their jobs Contextual performance supports an organization's innovation process through cooperative and collaborative actions that do not need formal organizational boundaries. For instance, partnering and collaborating on the implementation of new products (Gerke, Dickson, Desbordes & Gates, 2017).

Employees that actively participate in meetings, collaborate and share knowledge with others, explore new options, and gain new skills are examples of how innovation enhances employees' contextual performance (Somech & Khotaba, 2017). Ismail and Rodzalan (2021) affirmed that employees who demonstrate innovative work behaviors foster internal networks, collaborations, and interdependencies among coworkers, resulting in improved performance.

Bandara (2021) discovered that organizational innovation had a considerable impact on contextual performance in a Sri Lankan garment company. Also, Jankowski (2013) discovered that organizational innovation is substantially correlated with contextual performance in insurance organizations in Lesotho. Furthermore, Ismail and Rodzalan (2020) found a significant effect on organizational innovation and contextual performance. Employees' contextual performance is favorably influenced by organizational innovation because innovation helps employees overcome times of uncertainty, changes in the work environment, and resource scarcity, resulting in increased contextual performance (Akturan & Cekmecelioglu, 2016; Barnhill & Smith, 2018; Suwanti, Udin & Widodo, 2015).

## 2.2.6.2.3 Marketing Innovation and Contextual Performance

Advantages of marketing product innovation involve increased happiness, higher group solidarity, improved organizational collaboration, and dedication, as well as efficiency (Jordan, 2014). Marketing innovation encourages employees to think creatively as a result of their external interactions with customers and partners, motivating them to provide superior customer value, which strengthens customer attachment to an organization and its product offerings and, as a result, improves contextual performance (Mu, 2015).

Marketing innovation is the greatest promoter of contextual performance with regard to boosting its initiative, proactiveness, passion, originality, and customer value (Santos-Vijande, Lopez-Sanchez, Loredo, Rudd & Lopez-Mielgo, 2022). Similarly, marketing innovation allows businesses to be more driven and proactive in their responses to market developments, allowing them to form stronger bonds with their customers and hence result in increased contextual performance (Yu, Ramanathan & Nath (2017).

#### 2.2.6.3 Innovation Capability and Adaptive Performance

Byukusenge and Munene (2017) revealed that organizations with an inclination to innovate can face changes in the competitive environments and obtain superior performance. Correspondingly, Siahaan and Tian (2020) found that organizations with innovations perform better because it enables them to adapt to competition, the market, and the environment.

Park, Lee and Kim (2016) posited that for organizations to face environmental changes, survive, and improve their performance they need to be innovative. Similarly, for an organization to survive and meet superior performance, the employees and managers need to be dynamic and innovative to meet the needs of the customers and adapt to the changes in the external environment (Tsou & Chen, 2021). According to Yam, Lo, Tang and Lau (2011) the only way to maintain competitive performance, which is one of the most critical characteristics that give unique competitive advantages, is for organizations to innovate continuously.

According to Börjesson, Elmquist and Hooge (2014), the ability to innovate is the most vital for businesses and employees' adaptive performance since it allows them to respond effectively and efficiently to market demands as well as business environment volatility. Ali, Wu and Ali (2021) posited that innovation capability has a beneficial association with adaptive performance in an organization since it aid in problem-solving, uncertainty management, learning new tasks, interpersonal flexibility, and crisis management. Frishammar, Kurkkio, Abrahamsson, and Lichtenthaler (2012) stated that inventive capability is a critical component of an organization's ability to adapt to changing markets, technology, and competition

**2.2.6.3.1** Service and Technological Innovation and Adaptive Performance Service innovations increase the organization's capabilities to deal with the uncertainties of environmental changes and enhance customers' experiences, which ultimately enhances the performance of the organization (Tajeddini, Martin & Altinay, 2019). Service innovations in service organizations enable organizations to improve service quality and productivity, respond quickly to changing customer needs and expectations, and hence improve employees' performance (Perks, Gruber & Edvardsson, 2012).

Technological innovation capabilities are one of the most important factors in gaining a competitive advantage and excellent performance, and they include the ability to react to unanticipated technological change, produce new goods, and employ new technological processes to suit the present and anticipated future needs (Lee, Park, Yoon & Park, 2010). According to Damanpour, Walker and Avellaneda (2009), the implementation of service and technological innovation is a means for organizational adaptation and change to facilitate accomplishing the organizations' performance goals, particularly under the conditions of heavy competition, quickly evolving markets, limited resources, and customer and public demand for good quality and good products and services.

## 2.2.6.3.2 Organizational Innovation and Adaptive Performance

Organizations with greater organizational innovation will achieve a better response from the environment, obtaining more easily the capabilities needed to increase performance in an organization (Garcia-Morales, Ruiz-Moreno & Llorens-Montes, 2007). Organizations that can innovate and respond quickly to client needs are more likely to achieve greater work performance (Rangus & Slavec, 2017).

Vincent, Bharadwaj and Challagalla (2004, pg.13) posit that organizations faced with intense competition and turbulent environments often rely upon

innovation to survive and as the primary driver of performance. Fatoki (2021) states that the implementation of innovation in an organization enables an organization to become more flexible in its operations and drives the organization to improve the quality of its products, which ultimately increases its performance.

#### 2.2.6.3.3 Marketing Innovation and Adaptive Performance.

Market innovation capability can help an organization attain excellent performance since it permits them to address easily the changing demands of their clients and are better able to exploit new market opportunities (Wang, Zhang & Shou, 2021). According to Garcia-Zamora et al. (2013), marketing innovation is used by businesses to respond to changing client needs, improve performance, and become more competitive.

Pascual-Fernandez, Santos-Vijande, Lopez-Sanchez and Molina (2021) stated that marketing innovation in service sectors is seen as a crucial driver of adaptive performance because marketing innovation allows service sectors to cope with environmental changes and adapt to new client expectations. Ngamsutti (2016) proposed that marketing innovation capability is a performance driver because it permits a company to be more adaptable in today's volatile and uncertain environment. It also allows companies to respond to unintentional technological activity and unforeseen opportunities offered by competitors.

Marketing innovation is a critical managerial process because it is tied to performance and survival in the face of competition and environmental instability. Furthermore, marketing innovations are frequently used by businesses to deal with changing market trends and fluctuations in the channel environment, particularly in a turbulent channel environment, resulting in improved performance (Tuominen & Hyvonen, 2004). According to Kafetzopoulos and Psomas (2015), marketing innovation enables firms to improve performance, survive the present recession, and thrive in an insecure and unfavorable business climate.

Yuan, Shin, He and Kim (2015) postulated that growing marketing organizations can use marketing innovation to proactively acquire new techniques, skills, and knowledge to build their resource bank and artistically adapt to changing situations, resulting in enhanced business efficiency. Marketing innovation assists these businesses in dealing with competition, obstacles, and changing consumer preferences.

## 2.2.7 Innovation Capability Mediates the Relationship between Human Capital and Employee Performance.

Waseem et al. (2018) found that innovation capability partially mediates the relationship between human capital and organizational performance. They further explained that human capital works as a catalyst that enhances innovation in an organization which will ultimately result in improved performance. Also, Mc Dowel et al. (2018) found that human capital has a favorable impact on both innovation and performance, though its influence on performance is partly mediated by innovation. Because creative, bright people are more likely to spot opportunities, such opportunities are more likely to be realized through innovation, which increases performance.

The above findings are inconsistent with the findings of Xu, Shang, Yu, and Liu (2019) who didn't find any mediation role of innovation capability on the relationship between human capital and organizational performance. According to Yen (2013), human capital influences innovation capability which in turn influences the work performance of employees. Building human capital facilitates innovative capabilities which lead to the creation of new products and services. By introducing new products or services, organizations increase the market penetration rate, which eventually influences organizational performance.

Further, human capital is an important foundation of innovation and work performance because the knowledge possessed by an organization's employees is tightly linked to its products and services, thus it is evident that an organization's capacity to develop new products is inseparably associated with its human capital (Bornay-Barrachina et al., 2012). Also, it has been acknowledged that an organization's ability to generate innovation is associated with the knowledge and competencies of its human capital. Hence, to guarantee that innovation occurs, organizations might leverage valuable and inimitable human capital to cultivate organizational expertise for developing new products and services which will subsequently lead to higher work performance (Pradana et al., 2020).

Moreover, previous research on innovative activity has acknowledged the significance of employee expertise and knowledge, which permits employees to establish novel ideas and produce innovations that eventually result in increased work performance (Anand, Gardner and Morris, 2007). Also, human capital with diverse knowledge, ideas, and skills is essential for innovation capability and enhancing performance since organizations with a product and process innovation upgrade their performance faster than those without (Waseem et al., 2018).

Employees who possess a high quality of human capital can produce more novel mechanical ideas than employees with insufficient skills, thereby boosting the development of innovation capabilities which will ultimately lead to increased work performance (Liu, Chang, Fang, 2019). Sa'ari, Johare, Jali, Umar and Adenan (2013) observed that a library professional who possesses a high level of human capital is capable of providing creative and innovative ideas to solve problems which enhances his or her task performance such as coming up with an idea of developing a portal called an e-click that can monitor and speed up the 46 preparation of information sources and materials for usage by library users and avoid library users complaining due to postponements in getting the materials.

Employees who are highly educated can bring new and groundbreaking ideas which are aimed at increasing the performance and the effectiveness of the organization. For instance, librarians who are dynamic and specialized are capable of efficiently and effectively navigating and adapting social network sites (SNS) such as Facebook which is popular and widely used, an innovative and creative way of connecting to diverse community users, promoting their library activities, resources and services and informing the users of new academic resources, seminars, conferences and programs that they can take part in to expand and widen their customer base (Ntaka, 2017).

Similarly, librarians with extensive skills and knowledge can enhance and improve the performance and effectiveness of their library service. For example, highly educated and knowledgeable employees come up with innovative and creative ideas such as adapting popular internet services such as Facebook. Additionally, incorporating Facebook on their library homepage can help their library services attract a large number of new users and also retain old users, which will enable them to participate in conversations with diverse users and develop knowledge of them which will help them constantly evaluate and refine its services, collections, and programs to ensure that that the users are being satisfied (Kumar, 2015).

Grabner et al. (2018) proposed that having highly skilled workers ensures that they are capable of gathering and processing external information, which is especially important for innovation capability to thrive and thus intensifies their work performance. Also, highly educated employees are competent and are likely to exploit opportunities arising from an organization's innovation capability to increase their work performance and boost the growth of the organization.

Sanchez-Gutierrez, Cabanelas, Lampon and Gonzalez-Alvarado (2019) discovered that highly skilled employees can interact well with customers and therefore have an in-depth understanding of their needs and expectations which will lead to an introduction to a new service or product and an increase in production of quality and quantity services and therefore increase their overall work performance.

Sa'ari, Jali and Adenan (2014) proposed that library employees should expand their knowledge and skills so that they can produce novel or useful ideas to enable them to execute their tasks competently and successfully and to improve the provision of library services or generation of new library service. Correspondingly, organizations invest in employees' education so that they will have more skills and knowledge to establish new developments and creations which will make it easier to perform their jobs and therefore accomplish their set goals (Olaniyan & Okemakinde, 2008). Khan et al. (2015) argued that deficit skills and knowledge are negatively associated with innovation capabilities and employee performance because they are unable to come up with new ideas to solve problems and perform their jobs successfully and efficiently and therefore are unable to meet the new demands of the library users because of the absence.

Chatterjee (2017) posited that for employees to perform their jobs successfully and to be able to solve problems and meet the preferences of customers, they need to go for formal training so that they will be equipped with sufficient skills in developing technological solutions such as being able to tailor or modify a certain technology or service that can be used and be satisfactory to the customer. Training boosts the innovation capacity of employees and their work performance as there are upgraded and updated on the new customer needs and expectations and are kept informed on the latest technology that can help them perform their jobs creditably and meet their customer needs (Ramzan et al., 2016).

Improving the skills and knowledge of employees concerning learning and training is vital to facilitate the implementation of new processes, ideas, and products and thus improve the performance of the employees (Iddris, 2016). Tseng et al. (2014) agree that when employees have higher knowledge and skills, they establish new ideas and tactics to incorporate into products and processes. They instigate transformations in production and service delivery techniques which increases their task performance.

Personal training and learning among employees are useful in increasing their innovation capacity and work performance because it bolsters their ability to come up with novel ideas to solve problems, and enables them to introduce new products, processes, and technologies to meet up with rapidly changing business environment (Yaghoubi, Teymourzadeh, Bahadori & Ghadashi, 2017).

Correspondingly, library employees are encouraged to go for further training so that they can boost their competencies and skills, particularly in the use of new technologies so that they can execute their jobs successfully and also provide new and innovative services to meet the expectations of library users (Kealy, 2009). Congruently, employees with worthwhile knowledge and skills are positively correlated with innovative capability because they aid in recognizing new market prospects, and employees with such knowledge are keen to try out and implement new procedures which help them accomplish their tasks on time and achieve their goals (Tseng et al., 2014).

# CHAPTER III Methodology

This chapter provides information about the research design, participants/sample, data collection and analysis procedures as well as how the findings are analyzed.

#### 3.1 Research Design

A research design is an inclusive approach that the researcher uses in the study to assimilate the different elements of the study rationally and consistently, thus, warranting the research problem will be efficiently tackled. It also allows the researcher to come up with conclusions about the affiliation amongst variables (Bless & Higson-Smith, 2000). A research design is defined as an "approach of how the research questions will be answered, what procedures will be used to collect and analyze data and offering valid reasoning the researcher preferred specific methods to collect and analyze data (Creswell, 2009).

The researcher implemented a relational survey research design. The researcher was concerned with illustrating in detail the interactions and the relationships between the studied variables. Additionally, hypothesis testing was also conducted. The study was carried out in a usual environment with insignificant intrusions. The study was regarded as cross-sectional since it was implemented only over a single period.

### **3.2 Participants/Population and Sample**

A target population is a set of elements that the research focuses upon and to which the results obtained by testing the sample should be generalized (Bless & Higson-Smith, 2000). The population is defined as individuals in the universe who possess specific characteristics (De Vos et al., 2011). The target population of the study included librarians, deputy librarians, principal librarians, senior librarians, assistant librarians, and library assistants from academic libraries in three countries in Southern Africa, particularly Namibia, South Africa, and Zimbabwe. These groups were targeted because of their

knowledge, competencies, experiences, duties, and interest in the problem of the study.

Sampling is a technique by which a sample is drawn from the population (Bless & Higson-Smith, 2000). Sampling is a process of taking any portion of a population or universe as a representative of that population or universe (Patton, 2002). Sampling is the act, process, or technique of selecting a suitable sample, or a representative part of a population to determine the parameters or characteristics of the whole population (Bless & Higson-Smith, 2000).

The study used convenient sampling. A convenient, non-probability sampling was used to select all the librarians and library assistants since it was effortless and uncomplicated to get the details of the sample through the information provided on their mailing list which was available on their library database (Babbie, 2001).

A sample is a smaller number of people selected to represent the whole population in a study (Neuman, 2006). Bless and Higson-smith (2000) also describes a sample as a subset of the population that is used to represent a population. To estimate the sample size, the author followed Hoelter's (1983) and Hair, Anderson, Tatham and Black's (2010) recommendations. According to Hoelter (1983), to perform factor analysis, the minimum number of responses should be two-hundred. The researcher distributed five hundred and eighty (580) online questions to librarians and library assistants working in different academic libraries in Namibia, South Africa, and Zimbabwe and the researcher received 387 responses, thus exceeding the minimum number required by the technique. The list of the academic libraries that were involved in this research is summarized below:

## Table 1.

Namibian, South African, and Zimbabwean Academic Libraries that were involved in this Research

Academic Libraries	Country
International University of	Namibia
Management	
Namibia University of Science	Namibia
and Technology	
University of Namibia	Namibia
Durban University of	South Africa
Technology	
Rhodes University	South Africa
Sefako Makgatho Health	South Africa
Sciences University	
University of Kwazulu Natal	South Africa
University of Mpumalanga	South Africa
University of Pretoria	South Africa
University of Venda	South Africa
University of the Witwatersrand	South Africa
Africa University	Zimbabwe
Arrupe Jesuit University	Zimbabwe
Catholic University	Zimbabwe
Chinhoyi University of	Zimbabwe
Technology	
Great Zimbabwe University	Zimbabwe
Harare Institute of Technology	Zimbabwe
Harare Polytechnic	Zimbabwe
Marondera University of	Zimbabwe
Agricultural Science and	
Technology	
Midlands State University	Zimbabwe

 Table 1 (Continued)

National University of Science	Zimbabwe
and Technology	
Solusi University	Zimbabwe
University of Zimbabwe	Zimbabwe
Zimbabwe National Defence	Zimbabwe
University	
Zimbabwe Open University	Zimbabwe

### **3.3 Data Collection Tools/ Materials**

A socio-demographic questionnaire was used established by the researcher to obtain the socio-demographic characteristics of the employees. Features in the questionnaire needed information on age, gender, marital status, educational level, nationality, job position, years of work experience in the library, and location of the library.

To measure the participants' human capital, the study adopted the human capital measurement scale (HCMS) (Sharabati, Jawad & Bontis, 2010 & Vidotto et al., 2017). The HCMS is a 16-item self-report questionnaire that measures the employees' human capital based on 6 dimensions which are "training and education, experience and skills, and also leadership and motivation." The participants rate their thoughts on a 5-point Likert scale varying from 1 (strongly disagree) to 5 (strongly agree).

To assess the participants' work performance, the study adopted an individual work performance questionnaire (IWPQ) (Koopmans et al., 2013). The IWPQ is a 34-item self-report questionnaire that measures employees' work performance. The questionnaire is divided and grouped into 3 dimensions which include: task performance ("I maintain high standards of work"), contextual performance ("I guide my new colleagues beyond my job purview"), and adaptive performance ("I keep myself updated with new skills and knowledge e that help me quickly adapt to changes in the core task"). The

participants are to rate their responses on a 5-point Likert scale varying from 1 (strongly disagree), to 5 (strongly agree).

To measure the library's innovation capabilities three dimensions were used. These three dimensions are service and technological innovation, organizational innovation, and marketing innovation. The study adopted an Organizational Innovation capability scale from OECD (2005). The organizational innovation capability scale is a nine-item scale that measures an organization's implementation of new methods, procedures, administrative, and external relationships in enabling their innovation efforts. Respondents will be asked to rate the innovation activities and behaviors happening in their organization on a five(5) point Likert-type scale ranging from 1 (strongly disagree to 5 (strongly agree).

Item measures for service and technological innovation capability in the library were implemented from Islam, Arwal & Ikeda (2017. All items were measured with a five (5) point Likert-type scale ranging from 1 (strongly disagree to 5 (strongly agree). Furthermore, to measure the participant's marketing innovation capabilities, the study adopted a marketing innovation capability scale from Calik, Calisir and Cetingue (2017; OECD (2005). The marketing innovation capability scale is a 5 item scale that measures an organization's implementation of a new marketing concept or strategy. All items were measured on a 5-point Likert-type scale ranging from 1 (strongly disagree to 5 (strongly agree).

### **3.4 Data Analysis Procedures**

Statistical Package for Social Sciences v.23 (SPSS) and AMOS v.23 was employed to analyze the data gathered from the questionnaires. SPSS is a userfriendly, sophisticated software tool for manipulating and statistically analyzing data in social science research (Acton et al., 2009). Reliability analysis using Composite reliability and Cronbach's alpha value was first carried out to confirm the consistency of the questionnaires to ensure that similar results were again achieved by the participants under investigation (Field, 2013). Also, validity analysis was performed to examine the degree to which the questionnaires measured what is intended to be measure (Yu & Chen, 2015).

A descriptive analysis was performed to examine the characteristics of the research and variables. Responses were tallied and examined in terms of mean, percentage, and standard deviation for the descriptive analysis. To investigate the links between human capital, innovation capability, and employee job performance, the researcher used the structural equation modeling (SEM) technique. The researcher utilized SPSS v.23 and Amos v.23 for this. The SEM technique, according to Prajogo and Cooper (2010), can eliminate any biasing impact induced by measurement errors and develop the hierarchy of latent components. Furthermore, a mediation analysis was conducted to examine the mediating effect of innovation capability on the relationship between human capital and employee job performance.

## 3.5 Study Plan

Considering the above-mentioned dimensions, a self-administered questionnaire was designed to collect the data. In the first section of the questionnaire, demographic information of the respondents was taken, such as marital status, age, gender, sex, level of education, nationality, number of years of experience in the current library, location of the library, etc. In the second section, items on six dimensions of human capital were placed. The third section focused on employee job performance which was measured through three dimensions. Finally, the fourth section contained items related to three dimensions of innovation capability.

The researcher used online survey questionnaires to gather data, which, therefore, allowed the researcher to collect anonymous and confidential data cheaply from a large and geographically dispersed population and also allowed the researcher to accumulate responses in a standardized manner (Pickard, 2007). 580 individual emails with a link to an online questionnaire with an attached informed consent were distributed to librarians and library assistants located from academic libraries from Namibia, South Africa, and Zimbabwe.

The online questionnaires were distributed through e-mails inviting the librarians and library assistants to take part in the study after getting ethical clearance and permission from library directors. In total 387 participants filled out the questionnaire. Data were collected over a period of seven months (April to October 2020).

# CHAPTER IV Findings and Discussion

This chapter presents the findings based on the collected data.

## 4.1 Reliability Analysis of the Questionnaire

The Cronbach's alpha measure was used to evaluate the measurement construct's consistency. The acceptable value of Cronbach's alpha value and composite reliability is 0.70 above (Bland & Altman, 1997; Nullay 1994). The results in table 2, indicate that all the Cronbach's alpha values range from 0.701 to 0.924 and all the composite reliability scores range from 0.738 to 0.923 representing good reliability. According to Hair et al. (2010) and Molina et al. (2007), a Cronbach's alpha value and composite reliability score should be at least 0.70. Hence, our research instrument meets the internal consistency assumption.

Table 2.

## Reliability Analysis of the Questionnaire

Construct	Items	Cronbach's	Composite
		Alpha	Reliability
Human Capital	16	0.872	0.883
Training and Education	7	0.786	0.846
Experience and Skills	4	0.701	0.738
Leadership and Motivation	5	0.755	0.761
Innovation Capability	23	0.924	0.923
Service and Technological Innovation	10	0.901	0.913

Table 2	(Continue	d).
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Organizational innovation	8	0.805	0.820
Marketing innovation	5	0.739	0.755
Employee Performance	34	0.913	0.920
Task performance	13	0.837	0.853
Contextual performance	13	0.833	0.802
Adaptive performance	8	0.781	0.759

### 4.2 Validity Analysis of the Questionnaire

After the reliability was confirmed, the researcher analyzed the validity. Validity is defined as how well the questionnaire assesses what it is supposed to measure (Yu and Chen, 2015). The validity, according to Amin (2005), refers to the instrument's suitability. It is the ability to provide results that are consistent with the study's theoretical and conceptual values.

For the current study, the author followed content, face, convergent, internal, and discriminant validity techniques to ensure instrument validity. For content validity, the researcher adapted scales and items that had already been created and used by other researchers with common interests. Also, the questionnaire was given to the research supervisor and three professors and it was amended based on their ideas and recommendations to ensure face validity. As a result, the instrument was determined to have both face and content validity, making it a valid instrument for use in this study.

### 4.2.1 Convergent Validity

The study used a convergent validity test to determine the instrument's validity. Convergent validity can be used to study the correlation between items when a construct (hidden variable) is measured on a multi-item scale. The questionnaire has convergent validity if the correlation between factor loadings is high. This correlation is required to ensure that the test measures the right things. (Salehi, Fahimi, Zimon & Homayoun, 2021). Factor loadings and average variance extracted (AVE) were used to determine convergent validity (AVE). According to Kline (2011) and Salehi et al. (2021), a factor of 0.3 to 0.6 is adequate for convergent validity, and a factor larger than 0.6 is extremely desirable. Furthermore, according to Molina, Llorens-Montes, and Ruiz-Moreno (2007), the value of the (AVE) for individual constructs should be greater than 0.5 for convergent validity.

Table 3 shows the results of factor loadings varying from 0.255-to 0.611. The loadings of all indicators which does not fulfill the basic requirement, which is between 0.3 and above (Kline, 2011). Also, the AVE values for all indicators were less than 0.5, as advised by Awang (2012) and Molina et al. (2007). This is because Sharabati et al. (2010) used pharmaceutical services in Jordan as the initial research setting for the human capital measuring scale, whereas the current research context is completely different. Also, the initial setting for Koopmans et al. (2013)'s individual work performance scale was the Netherlands, which was different from the current study. Furthermore, the original research setting for Calik et al. (2017) innovation capability scale was small and medium enterprises in Turkey, whereas the current research is in a different sector.

Table 3.

### Factor Loadings

Constructs	Items	Factor Loading Ranges
Training and Education	7	0.292-0.478
Experience and Skills	4	0.415-0.473
Leadership and Motivation	5	0.305-0.475
Service and Technological	10	0.296-0.611
Innovation		
Organizational Innovation	8	0.334-0.435
Marketing Innovation	5	0.344-0.419

Table 3 (Continued).

Task Performance	13	0.303-0.431
Contextual Performance	13	0.306-0.352
Adaptive Performance	8	0.255-0.258

## 4.2.2 Discriminant Validity Analysis

A discriminant validity test was used to measure the construct validities of the instruments. The discriminant validity was assessed by Fornell and Larcker's (1981) approach. According to them, the value of a construct's variance with its indicators should be higher than other constructs. Moreover, if the square root values of average variance extracted (AVE) indicate a higher correlation among the pair indicators, it also indicates discriminant validity.

Table 4 shows that all the diagonal values in parentheses are greater than other squared correlations, which shows the study has adequate levels of discriminant validity. Taking into account these results, it can be confidently said that the measurement, data, and model adequately fulfill goodness conditions and contain benchmarked validity to analyze the formulated hypotheses.

Table 4.

Construct's Discriminant Validity

Variable	TE	ES	LM	STI	OI	MI	TP	СР	AP
TE	<b>O.874</b>								
ES	0.663	0.793							
LM	0.551	0.573	0.832						
STI	0.695	0.434	0.408	0.799					
OI	0.570	0.398	0.408	0.686	0.833				
TP	0.619	0.508	0.547	0.625	0.570	0.516	0.846		
СР	0.481	0.478	0.532	0.444	0.410	0.417	0.700	0.799	
AP	0.411	0.476	0.533	0.292	0.314	0.362	0.525	0.594	0.835

Note: Diagonal in parentheses represents the square root of Ave

### **4.3 Factor Analysis**

To perform a factor analysis, the current study evaluated the adequacy of the sample size and the multicollinearity factor. The current study assessed the sample size and multicollinearity factor, as proposed by Ooi (2014), to execute a factor analysis. When determining the sample size for factor analysis, the researcher used Hoelter's (1983) method. Factor analysis requires at least a two-hundred-person sample, according to Hoelter (1983). The current study comprises a total of 387 usable samples, all of which meet Hoelter's (1983) standards. Hair et al., (2010) recommended a 5:1 sample ratio. This suggests that the sample size should be five times larger than the instrument's number of items. The current study has eighty-two items that meet Hair et al., (2010)'s criteria.

In addition, the author used Bartlett's test of Sphericity and the Kaiser-Meyer Olkin (KMO) Test to determine sample size. The minimal value of the KMO test, according to Kaiser and Rice (1974) and Ozdamar (2002), should be more than 0.6. The KMO test resulted in a value of 0.922, which is significantly higher than the 0.6 minimum recommended by Kaiser and Rice (1974) and Ozdamar (2002). The result of Bartlett's test of sphericity reveals that there is an acceptable correlation between variables; it is 13902.567 and significant (p > 0.000), which is appropriate for factor analysis.

The author examined multicollinearity after confirming that the sample size was adequate. Multicollinearity occurs when there is a significant level of correlation or linkage between independent variables. Such a high correlation causes data to be skewed, which can jeopardize the conclusions' credibility. The presence of strong multicollinearity raises the confidence interval coefficient and lowers statistics. The null hypothesis is difficult to reject in the presence of multicollinearity in the data. Multicollinearity is usually created by adding a variable that is derived using other factors in the data, using dummy variables incorrectly or incorrectly, repeating the same variables over and over, and when variables are highly connected.

Different indicators can be used to examine multicollinearity. For example, if the researcher does not obtain significant results for particular statistics but does so for total statistics. This might result in a mixed set of outcomes, such as substantial or inconsequential, as well as showing the presence of multicollinearity. Multicollinearity can also be studied by separating the sample into two groups. Multicollinearity is observed when the coefficients of the two samples are significantly different. The variance inflation factor (VIF) is another method for detecting multicollinearity. VIF is one of the most widely used methods for detecting multicollinearity among researchers. A VIF value greater than 4 indicates the presence of multicollinearity (Hair et al., 2010). The examination of VIF reveals a block of VIF spanning from 1.195 to 4.047, indicating that multicollinearity between constructs does not exist

## 4.4 Measurement and Structural Models Assessment

According to Abbas and Sağsan (2019), the outer model, also known as the measuring model, is used to discover the link between latent variables and their measures. To put it another way, it's a term used to define the relationship between individual constructs and their corresponding indicator variables. Normally, calculations for composite reliability, indicator reliability, Cronbach's alpha value, and convergent and discriminant validity are assessed in the measurement model. The structural model is the inner model that is utilized to describe how constructions interact. The Measurement model demonstrates how different variables are related and lays out the model's theoretical foundation. Different scholars have offered different criteria to represent the measurement and structural models' goodness of fit. However, the most commonly reported indices are "chi-square to the degree of freedom (2/df), normative fit index (NFI), comparative fit index (CFI), the goodness of fit index (GFI), adjusted goodness of fit index (AGFI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR)."

The current study executed a confirmatory factor analysis (CFA) to evaluate how well the structural model fit the data using the Amos software. The study implemented the RMSEA measure which denotes the model's fitness. This measure examines the disparity between the model's hypothesized covariance matrix and the observed covariance matrix. The ideal value for RMSEA, according to Browne and Cudeck (1992), should be less than or equal to 0.08. The SRMR measure, which has been identified as a good criterion for fitting structural models, was also used in this study. This metric represents the square root of the discrepancy between the covariance model and the sample covariance matrix with a value less than 0.08 (Hu & Bentler, 1998). The RMSEA indicated a value of 0.054 which is greatly less than 0.08 and SRMR indicated a value of 0.067 which is greatly less than 0.08 which complied with the maximum values of 0.08 and 0.1 recommended by Browne and Cudeck (1992) and Hu and Bentler (1998), respectively. Overall, our study model is an excellent fit for further investigation.

## 4.5 Normality Test

The normality test was performed to evaluate if the data distribution was normal or not (Elsharnouby & Elbanna, 2021). The skewness and kurtosis of all measurement items were calculated to see if the data had a normal distribution, as shown in table 5. All of the items' absolute skewness scores were less than 3 and their absolute kurtosis scores were less than 8, showing that the data did not violate the normalcy assumption as recommended by Hair et al. (2010) and Kline (2015).

Table 5.

Normality Test

Constructs	Skewness	Kurtosis
Human Capital	543	.312
Training and Education	505	338
Experience and Skills	988	2.953
Leadership and Motivation	647	3.753
Innovation Capability	-948	.927
Service and Technological	953	.125
Innovation		

Table 5 (Continued)

Organizational Innovation	-1.173	3.386
Marketing Innovation	-1.361	3.850
Employee Performance	063	1.787
Task Performance	111	.000
Contextual Performance	.181	1.096
Adaptive Performance	768	4.386

### 4.6 Socio-Demographic Characteristics of Participants

Table 6, indicates that 245 (63.3%) of the participants were females and 142 (36.7%) of the participants were male employees. This implies that most participants of the study were females. The age groups of the participants show that 46 (11.9%) were 18-25-year olds, 128 (33.1%) were 26-30-year olds, 74 (19.1%) were 31-35 year olds, 73 (18.9%) were 36-40-year-olds, 41 (10.6%) were 41-45-year-olds, 17 (4.4%) were 46-50-year-olds and 8 (2.0%) of the participants were 51 years and above. This indicates that most of the participants were between the ages of 26-30 years old. The marital status of the participants indicates that 177 (45.7%) are single, 151 (39.1%) are married, 22 (5.7%) are divorced, and 14 (3.6%) of the participants are widows. and 23 (5.9%) are separated. This implies that most of the participants were single. The level of education of participants indicates that 8 (2.1%) of the participants had a high school qualification, 192 (49.6%) had a Bachelor's in LIS qualification, 84 (21.7%) had a Postgraduate diploma in LIS qualification, 77 (19.9%) had a Masters in LIS qualification, 21 (5.4%) had a Doctorate in LIS qualification, and 5 (11%) of the participants had another educational qualification. This indicates that most of the participants had a Bachelor's in LIS qualification.

The nationality of the participants indicates that 99 (25.6%) were Namibians, 112 (28.9%) were South Africans, 164 (42.4%) were Zimbabweans and 12 (3.1%) of the participants were of another nationality. This implies that most of the participants were Zimbabweans. The job status of the participants indicates that 19 (4.9%) of the participants were librarians, 29 (7.5%) were

deputy librarians, 33 (8.5%) were principal librarians, 75 (19.4%) were senior librarians, 131 (33.9%) were assistant librarians, and 100 (25.8%) of the participants were library assistants. This indicates that most of the participants were assistant librarians. The work experience of the participants at their current library was as follows: 147 (38.0%) 1-5years, 171 (44.2%) 6-10 years, 50 (12.9%) 11-15years, 13(3.4%) 16-20 years, and 1 (3%) 21 years and more. This implies that most of the participants had work experience which varied between 6-10 years. The location of the library of the participants indicates that 104 (26.9%) of the participant' libraries were in Namibia, 121 (31.3%) were in South Africa and 162 (41.8%) of the participants were in Zimbabwe. This implies that most of the participant's libraries were located in South Africa.

## Table 6.

Frequency Distribution of Participants According to Socio-Demographic Characteristics

Variable	Category	Frequen	Percentage (%)
		cy (n)	
Gender	Female	245	63.3
	Male	142	36.7
	18-25	46	11.9
	26-30	128	33.1
	31-35	74	19.1
	36-40	73	18.9
	41-45	41	10.6
	46-50	17	4.4
	51	8	2.0
Marital Status	Single	177	45.7
	Married	151	39.1
	Divorced	22	5.7
	Widow	14	3.6
	Separated	23	5.9

Table 6	(Continued).		
Level of	High School	8	2.1
Education	BA LIS	192	49.6
	Post Graduate Diploma LIS	84	21.7
	Master LIS	77	19.9
	Doctorate LIS	21	5.4
	Other	5	1.3
	Namibian	99	25.6
Nationality	South African	112	28.9
	Zimbabwean	164	42.4
	Others	12	3.1
Job Status	Librarian	19	4.9
	Deputy Librarian	29	7.5
	Principal Librarian	33	8.5
	Senior Librarian	75	19.4
	Assistant Librarian	131	33.9
	Library Assistant	100	25.8
Work Experience	1-5years	147	37.9
	6-10 years	176	45.5
	11-15 years	50	12.9
	16-20 years	13	3.4
	21 and above years	1	0.3
Location of	Namibia	104	26.9
Library	South Africa	121	31.3
	Zimbabwe	162	41.8

Note:n=387

## 4.7 Descriptive Analysis

A descriptive analysis was performed to examine the characteristics of the data and variables. Responses were tallied and examined in terms of mean, percentage, and standard deviation for the descriptive analysis (Ismail & Rodzalan, 2021, pg.98. The perfect distribution of data is indicated by descriptive statistical variables on each scale of 5 with the mean near 4 and 4.5 and the standard deviation close to 1. The obtained results reveal a favorable association between the variables. The relationship between the variables in the study can be said to be relatively independent. Tables 7, 8, and 9 show the detailed descriptive analysis of human capital, innovation capability, and employee job performance and their dimensions.

### 4.7.1 Level of Human Capital in Academic Libraries

Table 7 shows that the level of human capital in academic libraries in Namibia, South Africa, and Zimbabwe was high (mean=3.97 and standard deviation=0.72) on a 5-point scale. This indicates that the library workers in academic libraries in Nambia, South Africa, and Zimbabwe have high-level human capital. For all the dimensions evaluated, leadership and motivation have the highest (mean=4.14 and standard deviation=0.55), followed by experience and skills (mean=3.98 and standard deviation=0.72), and training and education (mean=3.79 and standard deviation=0.89). Taking into account the three elements of human capital, library personnel in academic libraries in Namibia, South Africa, and Zimbabwe, had greater leadership and motivation than experience and skills and training, and education.

The key aspects that influenced their leadership and motivation were that library personnel evaluated their actions (mean=4.19 and standard deviation=0.51), the library personnel constantly did their best (mean=4.16 and standard deviation=0.48), and library personnel learned from other colleagues (mean=4.16 and standard deviation=0.64). Under experience and skills elements, it was revealed that library personnel gives their all when performing duties (mean=4.11 and standard deviation=0.50), and library personnel consistently perform at their best (mean= 4.10 and standard deviation=0.65), and library personnel viewed themselves as highly professional (mean=4.08 and standard deviation=0.66). For training and education, library personnel considers themselves to be intelligent (mean=4.17 and standard deviation=0.53), and their competencies match with their work requirements and responsibilities (mean=4.07 and standard deviation=0.53), and library personnel continuously learn from others (mean=4.04 and standard deviation=0.74).

# Table 7.

# Level of Human Capital

Rank	Human Capital Dimensions	Mean	SD
	Leadership and Motivation	4.14	0.55
1	I evaluate my actions.	4.19	0.51
2	I learn from other colleagues.	4.16	0.48
3	I constantly do my best.	4.16	0.64
4	I usually put a lot of effort into my work.	4.12	0.63
5	I possess leadership skills.	4.06	0.51
	Experience and Skills	3.98	0.72
1	I give my all when I am performing duties.	4.11	0.50
2	I consistently perform at my best	4.10	0.65
3	I am highly professional.	4.08	0.66
4	I have worked for many years in the current	3.62	1.10
	library and information service.		
	Training and Education	3.79	0.89
1	I consider myself intelligent.	4.17	0.53
2	My competencies match my work	4.07	0.71
	requirements and responsibilities.		
3	I continuously learn from others	4.04	0.74
4	I am an expert in my respective area.	4.01	0.75
5	The library devotes a lot of time and energy to	3.50	1.17
	updating and developing employees' skills and		
	abilities.		
6	We undergo continuous training programs	3.47	1.17
	every year.		
7	I am considered the best employee in our	3.25	1.22
	library organization.		
Overall		3.93	0.72

### 4.7.2 Level of Employee Job Performance in Academic Libraries

Table 8 reveals that the overall level of employee job performance in academic libraries in Namibia, South Africa, and Zimbabwe was high (mean= 4.17 and standard deviation=0.57) on a 5-point scale. For all the dimensions assessed, the contextual performance had the highest (mean=4.24 and standard deviation=0.51), followed by the adaptive performance (mean=4.17 and standard deviation=0.57), and task performance (mean=4.10 and standard deviation=0.64). Taking into account the three dimensions of employee performance, library workers in academic libraries in Namibia, South Africa, and Zimbabwe, had greater contextual performance than adaptive and task performance. The most important features that influenced their contextual performance were that library workers were industrious in accomplishing tasks (mean=4.28 and standard deviation=0.49), were attentive towards their duties (mean=4.25 and standard deviation=0.46).

Under adaptive performance, it was revealed that library personnel can easily adjust to changes in their workplace (mean=4.24 and standard deviation=0.54), can devise novel answers to fresh problems (mean=4.22 and standard deviation=0.57), can keep their job knowledge up to date (mean=4.17 and standard deviation =0.54), and can deal well with ambiguous and unforeseen circumstances at work (mean=4.17 and standard deviation=0.54). For task performance, it was shown that library personnel can write and communicate orally (mean=4.24 and standard deviation=0.48), can work accurately and neatly (mean=4.21 and standard deviation=0.50).

#### Table 8.

Employee boo I enjointanee Devels in Medalenne Elbrane	Employee Job Pe	rformance Level	ls in Acaa	lemic Li	braries
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Rank	Employee Job Performance Dimensions	Mean	SD	
	Contextual Performance	4.24	0.51	
1	I am industrious in accomplishing tasks.	4.29	0.51	

Table 8	(Continued)		
2	I am resourceful in accomplishing tasks	4.28	0.49
3	I am attentive to my duty.	4.25	0.46
4	I communicate effectively on the job.	4.25	0.51
5	I am proactive and creative on duty.	4.25	0.51
6	I can dedicate myself to duty.	4.24	0.47
7	I show initiative on the job.	4.23	0.51
8	I am motivated to do my job.	4.23	0.52
9	I can cultivate and maintain interpersonal	4.22	0.48
	relations.		
10	I can cooperate and help others.	4.22	0.49
11	I can deal with others politely.	4.20	0.45
12	I can persist with enthusiasm and extra	4.20	0.56
	effort, which is necessary to complete my		
	tasks successfully.		
13	I am committed to the library.	4.14	0.66
	Adaptive Performance	4.17	0.57
1	I can adjust fast to changes at my workplace.	4.24	0.54
2	I am capable of devising novel answers to	4.22	0.57
	fresh problems.		
3	I keep my job knowledge up-to-date.	4.17	0.54
4	I can deal well with ambiguous and	4.17	0.54
	unforeseen circumstances at work.		
5	I can deal effectively with complex	4.16	0.59
	circumstances and obstacles at work.		
6	I keep my skills updated.	4.14	0.55
7	I demonstrate flexibility.	4.13	0.56
8	I can recover faster after difficult situations	4.13	0.66
	and set back at work.		
	Task Performance	4.10	0.64
1	I can write and communicate orally.	4.24	0.48
2	I can work accurately and neatly.	4.22	0.49
3	I am knowledgeable about my job.	4.21	0.50

## Table 8 (Continued)

Table 6	(Commued)		
4	I can complete my job tasks.	4.21	0.53
5	I am able to update my knowledge and skills.	4.20	0.49
6	I am skilled in how to do my job.	4.20	0.52
7	I can monitor and control library services.	4.19	0.52
8	I am able to plan and organize library services.	4.19	0.53
9	I am able to produce quality work.	4.18	0.50
10	I am able to solve problems that arise from my	4.14	0.58
	job.		
11	I am able to produce quantity work.	4.05	0.76
12	I participate in the library administration.	3.65	1.19
13	I participate in library decision-making.	3.57	1.23
Overall		4.17	0.57

Table 8 (Continued)

### 4.7.3 Degree of Innovation Capability

Table 9 shows that the degree of innovation capability in academic libraries in Namibia, South Africa, and Zimbabwe was high (mean= 3.93 and standard deviation=0.82) on a 5-point scale. This implies that the academic libraries in Nambia, South Africa, and Zimbabwe have high degrees of innovation capabilities. For all the dimensions examined, marketing innovation had the highest (mean=4.04 and standard deviation=0.74), followed by organizational innovation (mean=4.01 and standard deviation=0.73), and service and technological innovation (mean=3.76 and standard deviation=0.99). This implies that academic libraries in Namibia, South Africa, and Zimbabwe have more marketing innovation capabilities as compared to organizational, service, and technological innovation capabilities.

The significant features that contributed to the high degree of marketing innovation are that the library makes changes to the appearances, packaging, shape, and volume of products and services (mean=4.12 and standard deviation=0.66), the library makes improvements to its relationships to obtain user satisfaction (mean=4.09 and standard deviation=0.70), and those new ideas that come from users and suppliers are evaluated continuously and are included in product development activities (mean=4.06 and standard

deviation=0.71). Under organizational innovation, it was revealed that the library collaborates with library users (mean=4.20 and standard deviation=0.55), the library provides flexible job responsibilities (mean=4.09 and standard deviation=0.64), and the library makes use of archives of quality standards, lessons, and other information (mean=4.09 and standard deviation=0.70). For service and technological innovation, the library always focuses on ways of satisfying library user needs (mean=4.20 and standard deviation=0.49), and the library provides user-centered services (mean=4.10 and standard deviation=0.63), and the library provides consultancy (mean=3.98 and standard deviation=0.84).

### Table 9.

Rank	Innovation Capability Dimensions	Mean	SD
	Marketing Innovation	4.04	0.74
1	Our library needs to make changes to the	4.12	0.66
	appearances, packaging, and shape, and		
	volume of our products and services.		
2	Our library makes improvements in the	e 4.09	0.70
	manner of user relationships to obtain user	ſ	
	satisfaction.		
3	New ideas that come from users and suppliers	s 4.04	0.74
	are evaluated continuously, and we try to	4.06	0.71
	include them in product development	t	
	activities.		
4	Our library constantly looks for new ways to	<b>4.04</b>	0.68
	deliver our information and services to our	ſ	
	users.	3.91	0.96
5	Our library implements new marketing	5	
	methods to promote our services.		
	Organizational Innovation	4.01	0.73
1	Our library collaborates with users.	4.20	0.55

## Degree of Innovation Capability in Academic Libraries

Table 9	(Continued)		
2	Our library provides flexible job responsibilities.	4.09	0.64
3	Our library makes use of databases of best practices, lessons, and other knowledge.	4.09	0.70
4	Our library makes use of inter-functional working groups.	4.08	0.66
5	Our library uses methods for integration with suppliers.	4.05	0.68
6	Our library makes use of quality management	4.00	0.70
7	systems. Our library uses an implementation of practices for employee development and better worker retention.	4.00	0.75
8	Our library employs decentralization in decision-making.	3.59	1.17
	Service and Technological Innovation	3.76	0.99
1	We always focus on ways of satisfying library user needs.	4.20	0.49
2	We provide user-centred services.	4.10	0.63
3	We provide consultancy.	3.98	0.84
4	Our services are often perceived as very novel and relevant by our library users.	3.96	0.83
5	We are always quick in coming up with novel ideas or services for library users.	3.86	0.96
6	We have an excellent service delivery system (automated circulation, inter-library loan,	3.65	1.14
7	online reference, etc.) We use state-of-the-art technology (RFID, QR code, digital library, etc.) to provide	3.61	1.11
8	services. We provide a user-friendly interface (OPAC, website) to meet user needs.	3.61	1.26

Table 9	(Continued)		
9	New services are provided through mobile	3.46	1.25
	apps or mobile websites.		
10	We provide an effective presence on social	3.19	1.39
	media (Facebook, Twitter, etc).		
Overall		3.93(0.82)	

## 4.8 Hypotheses Testing

The author analyzed the formulated hypotheses using the SEM technique. The SEM technique was employed because it allows researchers to quantify variables precisely. It also makes it easier for academics and researchers to look at theoretical ideas in non-experimental data. It is thought to be the most powerful process of eliminating any biasing impact induced by measurement errors and constructing the hierarchy of latent components. It's also widely acknowledged as the best method for examining the link between observable and latent variables.

Tables 10 and 11 show the results of the hypotheses testing, respectively. The results of the direct association between human capital, innovation capability, and employee job performance are presented in Table 8. In the path analysis, human capital (HC) indicated a significant and positive effect on employee job performance (EJP) ( $\beta$ =0.689, p<0.05). Also, HC indicated a significant and positive effect on innovation capability (IC) ( $\beta$ =0.694, p<0.05). Furthermore, IC showed a significant and positive effect on EJP ( $\beta$ =0.620, p<0.05). This led to the conclusion that main hypotheses H1, H2, and H3 are accepted. Therefore, the hypothesized relationships between human capital, innovation capability, and employee job performance, are statistically supported based on these findings.

The researcher used dimensional analysis to investigate the relationships between the variables in greater depth. The dimensional analysis indicated that HC has a significant and positive effect on task performance (TP) ( $\beta$ =0.660, p<0.05), contextual performance (CP) ( $\beta$ =0.567, p<0.05), and adaptive performance (AP) ( $\beta$ =0.525, p<0.05), which suggests H1a, H1b, and H1b respectively are accepted. Furthermore, HC showed a significant and positive effect on service and technological innovation (STI) ( $\beta$ =0.646, p<0.05), organizational innovation (OI) ( $\beta$ =0.561, p<0.05), and marketing innovation (MI) ( $\beta$ =0.569, p<0.05), thus H2a, H2b, and H2c respectively are accepted. Finally, IC indicated a significant and positive effect on TP ( $\beta$ =0.673, p<0.05), CP( $\beta$ =0.490, p<0.05), and AP ( $\beta$ =0.355, p<0.05), hence H3a, H3b, and H3c respectively are supported. The dimensional relationships are statistically supported based on these findings and the findings are shown below in table 10.

Table 10Results of Direct Hypotheses Testing

Hypotheses	Variables	Estimate	SE	t-value	p-value	Decision
		(β)				
H1	HC→EJP	0.694	0.061	18.930	0.000**	Supported
H1a	HC→TP	0.660	0.027	17.255	0.000**	Supported
H1b	НС→СР	0.567	0.022	13.503	0.000**	Supported
H1c	НС→АР	0.525	0.017	12.117	0.000**	Supported
H2	HC→IC	0.689	0.051	18.656	0.000**	Supported
H2a	HC→STI	0.646	0.040	16.594	0.000**	Supported
H2b	НС→ОІ	0.561	0.022	13.312	0.000**	Supported
H2c	HC→MI	0.569	0.015	13.590	0.000**	Supported
H3	IC→EJP	0.620	0.033	15.505	0.000**	Supported
H3a	IC→TP	0.673	0.016	17.859	0.000**	Supported
H3b	IC→CP	0.490	0.014	11.028	0.000**	Supported
H3c	IC→AP	0.355	0.011	7.454	0.000**	Supported

\*p≤0.05; \*\* p≤0.01;. HC=Human capital; EJP=Employee Job Performance; IC=Innovation Capability;

TP= Task performance; CP= Contextual performance; AP=Adaptive Performance; STI=Service and Technological Innovation; OI=Organizational Innovation; MI=Marketing Innovation

## 4.9 Mediation Analysis

Following the testing of the below relationships between variables, the author looked at the mediation effect to see how the introduction of a mediator, also referred to as an intermediate or intervening variable, affects the relationship between the independent and dependent variables. Instead of a direct causal relationship between the dependent and independent variables, a mediator is introduced in the mediation analysis, and it is argued that the independent variable influences the intermediary variable (non-observed variable), which then influences the dependent variable. As a result, the mediating variable can be said to be used to clarify the type of relationship that exists between the dependent and independent variables. There are a variety of types and strategies for analyzing the mediation effect in the literature. Baron and Kenny's (1986) mediation steps, direct versus indirect effect, full versus partial mediation, Sobel test, bootstrapping approach, and other techniques are notable.

The study employed a mediation analysis to determine if innovation capability has a mediating effect on the relationship between human capital and employee job performance. The study followed the guidelines of MacKinnon et al. (2002) which allows us to measure the mediation proportion, the below table 12 shows us that innovation capability partially mediates the relationship between innovation capability and employee performance. First, the direct effect signifies the direct relationship between human capital and employee performance without the mediator variable, and this relationship was found to be significant and positive ( $\beta$ =0.693, SE=0.049, p <0.001).

Secondly, the indirect path signifies the indirect effect of human Capital on employee performance through the mediator (Innovation Capability) and was statistically significant and positive ( $\beta$ =0.264, SE=0.049, p<0.001). Thirdly, the total effects which examined the direct and indirect effects of the human capital on employee performance were equally significant ( $\beta$ =0.957, SE=0.051, p<0.001). In addition, the mediation proportion was examined following the recommended procedure by MacKinnon et al. (2002) which seeks to explain the effect of human capital on employee performance through innovation capability. The mediation proportion is obtained by dividing the indirect effect estimate which is the total effect estimate and the results show (0.264/0.957) = 0.28, suggesting that innovation capability plays a mediating role in the relationship between human capital and employee performance.

Furthermore, the regression coefficient between human capital and employment performance and the regression coefficient between innovation capability and employment performance was statistically significant (p < 0.05) with positive influence as indicated by the positive coefficient values. The indirect effect was  $1.2^* \ 0.23 = 0.28$ . Conclusively as indicated by the table above the effect of human capital on employment performance was partially mediated through innovation capability [ $\beta$ =0.264, p<0.05 at 95% CI [0.167, 0.3361]]. Therefore, H4 is accepted. Below table 11 show the mediation analysis.

### Table 11.

Mediation Analyis

Path	Direct	Indirect	Total	SE	z-value	p-value
	Estimate	Estimate	Estimate			
HC→EJP	0.693			0.068	10.133	<.001**
HC→IC→EJP		0.264		0.049	5.326	<.001**
HC→EJP			0.453	0.051	18.704	<.001**
*=<0.05. ** =<0.0	14					

\*p≤0.05; \*\* p≤0.01.

# CHAPTER V Discussion

### **5.1 Discussing the Results**

This chapter presents the discussion of these findings in comparison to the studies in the literature. The first research question aimed to assess the level of the human capital of library employees in academic libraries. The findings showed that the level of human capital in academic libraries in Namibia, South Africa, and Zimbabwe was high. This finding affirmed the findings of Peters and Brijlal (2011) who found a high level of human capital in small and medium enterprises in South Africa as a result of employees' job experiences and educational levels.

The findings of the study are supported by the findings of Dash and Roy (2020) who found a high level of human capital in service and manufacturing industries which was attributed to employees' diverse set of human capital attributes, which included their work experiences, competencies, work knowledge, and skills. The findings contradicted those of Katuli-Munyoro and Mutula (2016) who reported that there was a shortage of human capital among LIS lecturers in Zimbabwean universities because highly experienced and qualified academics were compelled to flee the country in search of better opportunities.

The second research question aimed to determine the degree of innovation capabilities in academic libraries. The results revealed that the degree of innovation capabilities in academic libraries in Namibia, South Africa, and Zimbabwe was high. This finding agrees with the findings of Aharony (2013) who revealed that library personnel with greater innovation capabilities are more technologically innovative and seek out fresh and powerful innovations to introduce into their libraries, to make them more appealing to users. The findings concur with Islam et al. (2017) who found that academic libraries with greater levels of innovation capabilities were prepared to implement fresh ideas, adapt to environmental changes and the needs of users, and accept technological advancements. This finding contradicts that of Egbetokun et al.

(2016) who found some moderate degree of innovation capabilities among firms in Southern Africa, particularly from Lesotho, Zambia, and South Africa.

The third research question sought to evaluate the level of employee job performance in academic libraries. The findings showed that the level of employee job performance in academic libraries in Namibia, South Africa, and, Zimbabwe was high. This is in line with the findings of Dabengwa et al. (2018) who found that majority of academic librarians at Zimbabwean Universities have high levels of job performance. This finding corroborated the findings of Saka and Salman (2014) and Saliu and Wankasi (2018) who found that library personnel at Nigerian Universities have high levels of job performance. The findings contradict that of Okeke and Mtyunda (2017) who found that the job performance of secondary teachers in one Education District in Eastern Cape Province South Africa was average.

The relationship between human capital and employee job performance was investigated in the first hypothesis. The findings showed that human capital significantly and positively affects employee performance. H1 is supported which is similar to Becker's (1962) human capital theory and the resource-based view (Barney and Wright 1998) which stated that human capital, consists of employees' capabilities and personal attributes that allow them to be more effective in their work. This is consistent with the report of Katuli-Munyoro and Mutula (2016) who found that human capital is the most valuable resource which is integral in improving the performance of LIS lecturers' and leads to effective and efficient delivery of LIS curricula. This is in line with the report of Asonitis and Kostagiolas (2010), who opined that human capital plays a significant role in enabling library professionals to complete their duties successfully and deliver quality services, and attain their goals, and ultimately improve their work performance.

The findings of the study are corroborated by the report of White (2007) who found that human capital enhances library professionals planning procedures,

their ability to make good decisions, and work performance. This is inconsistent with the findings of Amoah and Akussah (2017) who discovered that librarians' work performance is not connected to their human capital. This negative association was caused by a lack of progress in librarians' performance particularly, among those who had training associated with the library. Furthermore, the findings of the current study contradict the findings of Kasuga (2020) who found that there is a negative association between human capital and employee work performance in service sectors. This implies, according to the authors, that human capital in service sectors was not used efficiently to improve work performance.

The dimensional relationship between human capital and the dimensions of employee job performance was established in hypotheses H1a, H1b, and H1c respectively. The dimensional analysis indicated a significant and positive effect of human capital on all dimensions of employee job performance, namely task, contextual and adaptive performance. The significant and positive effect of human capital on task performance is aligned with the study of Ali (2020) who claimed that human capital enhances employees' task performance, which is shown by employees' quality of work, the quantity of work, effectiveness, and efficiency when discharging their duties. This is also consistent with the report of Ullah et al. (2018) who reported that human capital enables employees to perform their responsibilities in a smart, efficient, and better way.

Human capital also had a significant and positive effect on contextual performance. This is related to the study of Zaharie et al. (2019) who indicated that human capital facilitates employees' communication skills and interpersonal skills and ultimately enhances the organizational service quality, and accelerates employees' contextual performance. This is corroborated by the findings of Tastan and Davoudi (2015) indicated that human capital has a positive impact on employee motivation, employee commitment, and overall contextual performance.

The empirical analysis of human capital on adaptive performance also showed a significant and positive effect. This is supported by the study of Mitchelle et al. (2020) who discovered that there is a positive association between human capital and organizational capacity to respond to environmental changes which ultimately leads to an improvement in adaptive performance and overall employee performance. This is consistent with the study of Wang et al. (2020) who reported that human capital expedites employees' knowledge, and problem-solving skills and enables employees to make effective which leads to positive adaptive performance.

The relationship between human capital and innovation capability was established in the second hypothesis. The findings indicated human capital has a significant and positive effect on innovation capability. H2 is supported which is similar to the assertion of the resource-based view which states that employees with distinctive and extra-ordinary human capital are positively associated with an organization's innovation capabilities since they add to the discovery of novel market opportunities, and employees with such human capital are open to experimentation and implementation of diverse processes (Cabello-Medina et al., 2011). The findings concur with the findings of Dakhli and De Clercq (2004) who found out that human capital has a significant and positive effect on innovation capability. They highlighted in their study that human capital that integrates employees' work experiences, professional skills, and leadership skills is the driving force behind the organization's innovation activities.

The findings of the study are supported by the findings of Omerzel and Jordana (2016) who found a positive correlation between human capital and innovation in an organization. They explained that if an organization has high-quality human capital comprised of employees who are intelligent, specialists, and capable of establishing novel ideas and strategies, the more likely it is that they will be able to innovate. This aligns with the report of Bornay-Barrachina et al. (2012), who identified that human capital is an essential foundation for innovation because the knowledge possessed by an organization's employees is tightly linked to its products and services; thus, it is evident that an organization's capacity to develop new products is inseparably associated with its human capital. This disagrees with the findings of Saka-Helmhout et al.

(2020) who discovered that human capital has a negative effect on innovation capability in organizations in developing, African countries because these organizations are known to be afflicted by an intense human capital vacancy, which implies a lack of certain expertise, abilities, and knowledge to recognize and comprehend new knowledge and convert this into new products and services.

The dimensional relationship between human capital and the dimensions of innovation capability was established in hypotheses H2a, H2b, and H2c respectively. Human capital indicated a significant and positive effect on all dimensions of innovation capability, namely service and technological innovation, organizational innovation, and marketing innovation. The significant and positive effect of human capital on service and technological innovation is related to the report of Tsou and Chen (2020) who reported that service and technological innovation value can be created by remodeling or creatively leveraging human capital resources and competencies. This is supported by the findings of Hsu and Fang (2009) who found that an organization with greater human capital has more innovative capability to improve its new service and technological creation performance because employees with more human capital can fully utilize their skills and abilities.

Human capital also indicated a significant and positive effect on organizational innovation. This is similar to the findings of Taggar (2002) who found that employees with high-quality human capital such as valuable knowledge lead to excellent organizational innovative capabilities because they contribute to identifying new market opportunities, and employees with such knowledge are willing to experiment and apply new procedures. This is related to the study of Nguyen (2018) who affirmed that one of the major influences on knowledge, experiences, and skills. This disagrees with the findings of Aravanitis et al. (2016) found that human capital has no substantial relationship with Greek organizations' innovation activities, which might be viewed as another indicator of the country's relative innovation backwardness.

Furthermore, human capital indicated a significant and positive effect on marketing innovation. This is supported by the findings of Pater and Lewandowska (2015) who found that employee human capital is a stimulating component that drives marketing innovation. This is aligned with the study of Omerzel and Jordana (2016) who reported that an organization's marketing innovation potential is primarily reliant on its human capital, which therefore indicates that the greater the number of employees who are innovative, brilliant, experts, and capable of developing new ideas and knowledge, the more capable the company is.

To determine the relationship between innovation capability and employee performance the third hypothesis was tested. The findings indicated that innovation capability has a significant and positive effect on employee job performance. H3 is supported which is related to the principles of the resource-based view which considers innovation capabilities as outstanding, hard to imitate, and worthy resources that boost performance in an organization (Ahmed et al., 2020; Gurlek 2020). This is similar to the findings of Sadikoglu and Zehir (2010) who found that innovation through the creation of employees' ideas for new products and services enhances the production of quality products and services and also increases customer satisfaction in an organization and therefore enhances the overall work performance of the employees.

The results of the study are aligned with the report of Obeng and Mkzhize (2017) who reported that an organization's innovative capacity increases employees' efficiency and productivity, which is illustrated by their ability to conduct tasks on time and swiftly respond to the expectations and demands of customers. This is consistent with the report of Walker (2010) who established that innovation enables employees to effectively and efficiently manage their work and achieve better performance. This disagrees with the report of Hussen and Cokgezen (2021) who reported that innovation is not a key factor of employee performance in emerging African organizations. The authors point out that, even though African organizations are innovative, transforming innovation output into employee performance is impeded by administrative and resource constraints.

The dimensional relationship between innovation capability and the dimensions of employee job performance was examined in hypotheses H3a, H3b, and H3c respectively. Innovation capability indicated a significant and positive effect on all dimensions of employee job performance, namely task, contextual and adaptive performance. The significant and positive effect of innovation capability on task performance is related to the report of Bhat and Sharma (2020) who highlighted that innovation improves employees' task performance which is reflected by their ability to produce quality and quantity of work, their full attendance on the job, and the competence and usefulness of work completed. This is similar to the study of who revealed that Zulfiqar et al. (2017) stated that innovation capability has a positive effect on the task performance of employees. They argued that the liberalization of the financial services sector in Ghana helped the task performance of employees to increase. For instance, the transformation from manual deposit and withdrawal to an automated approach not only enhanced the performance of teller attendants but also increased the number of customers.

The empirical analysis of Innovation capability on contextual performance indicated a significant and positive effect. This result is in line with the report of Xerri and Brunetto (2013) who pointed out that effective facilitation of employees' innovative behavior contributes to the development of employees' extra-role behavior, increases employees' commitment and dedication to their organization, and enhances employees' ability to share information and knowledge among coworkers and hence improves employees contextual performance. This is corroborated by the study of Harari, Reaves and Viswesvaran (2016) who posited that contextual performance which is characterized by good interpersonal relationships among employees, cooperating, and helping others is determined by employees' innovation capabilities.

Innovation capability also showed a significant and positive effect on adaptive performance. This finding is supported by the findings of Ali et al. (2021) who found that innovation capability has a beneficial association with adaptive performance in an organization, since it aids in problem-solving, uncertainty

management, learning new tasks, interpersonal flexibility, and crisis management. This is corroborated by the study of Börjesson et al. (2014) who postulated that the ability to innovate is the most vital for businesses and employees' adaptive performance since it allows them to respond effectively and efficiently to market demands as well as the business environment volatility. This is consistent with the findings of Byukusenge and Munene (2017) who revealed that organizations with inclination to innovate can face changes in the competitive environments and obtain superior performance.

To investigate the mediation effect of innovation capability on the relationship between human capital and employee performance the fourth hypothesis was tested. The findings revealed that Innovation capability partially mediates the relationship between Human capital and Employee performance.H4 is supported which shows that on the one hand human capital can directly affect employee performance. On the other hand, human capital has an indirect effect on employee performance. This is supported by the findings of Mc Dowel et al. (2018) who found that human capital has a favorable impact on both innovation and performance, though its influence on performance is partly mediated by innovation. Because creative, bright people are more likely to spot opportunities, such opportunities are more likely to be realized through innovation, which increases performance. This is consistent with the findings of Waseem et al. (2018) who found that innovation capability partially mediates the relationship between human capital and organizational performance. They further explained that human capital works as a catalyst that enhances innovation in an organization which will ultimately result in improved performance

The results of the current study are in line with the findings of Yen (2013) who discovered that human capital influences innovation capability which in turn influences the work performance of employees. The author explained that building human capital facilitates innovative capabilities which lead to the creation of new products and services. By introducing new products or services, organizations increase the market penetration rate, which eventually influences organizational performance. This is inconsistent with the findings

of Xu, Shang, Yu, and Liu (2019) who didn't find any mediation role of innovation capability on the relationship between human capital and organizational performance.

### **CHAPTER VI**

### **Conclusion and Recommendations**

This chapter presents conclusions based on the research findings according to the objective and sub-objective(s) of the research and gives recommendations accordingly.

### 6.1 Conclusion

The main aim of the study was to investigate the mediation effect of innovation capability on the relationship between human capital and workers' performance in academic libraries across Namibia, South Africa, and Zimbabwe. All hypotheses presented in the study were validated by the results. Hypotheses were examined using data acquired from librarians and library assistants from academic libraries across Namibia, South Africa, and Zimbabwe using online questionnaires. The analysis of the hypothesis was done through the multivariate technique facilitated by the SEM technique. The findings revealed that human capital has a significant and positive effect on innovation capability and employee performance. It was also discovered that innovation capability has a significant and positive effect on employee performance. Furthermore, the study highlighted that innovation capability partially mediates the relationship between innovation capability and employee performance.

Overall, the present study shows that both human capital and innovation capabilities are key components in nurturing innovation capabilities and employee performance in academic universities in Namibia, South Africa, and Zimbabwe. The current research contributes to a range of theoretical and practical areas. The study's framework was based on HCT and the RBV theory. The study's findings lend empirical credence to theories and literature related to these theories. Furthermore, the empirical findings add to the little literature on human capital, innovation capability, and employee job performance.

From a practical standpoint, the findings of this study suggest that businesses should pay close attention to human capital strategies since they can boost both

innovation capacity and employee performance. Given the importance of human capital, it is proposed that organizations should combine their human capital initiatives with their innovation strategies to improve employee performance.

### 6.2 Recommendations According to the Findings

Our results lead to some implications and recommendations for library managers and policymakers. The empirical evidence has demonstrated that human capital has a significant and positive effect on both innovation capabilities and employee job performance. Hence, library managers and policymakers are encouraged to place emphasis on the part played by human capital and invest in the most viable elements of human capital to build innovation capabilities among employees (Lor & Britz, 2007; Tessema, 2014). Also, library managers and policymakers need to understand methods to improve the meticulousness of human capital and, more importantly, understand how to harness and leverage human capital to improve the performance of employees (Prajogo & Oke 2016). Providing training programs and improving employees' qualifications through continuous professional education, are some of the ways that library managers and policymakers can effectively leverage a firm's human capital to increase competencies and strengthen the performance of librarians (Ondari-Okemwa, 2006; Osadebe, Babarinde, Ekere & Dike, 2018).

Furthermore, the results of this study provide sufficient empirical evidence that shows that innovation capability partially mediates the relationship between human capital and employees' job performances in academic libraries. Hence, if library managers and policymakers would like to vastly improve employees' performance, they must devote greater attention to both human capital and innovation capability as they are critical components for enhancing employee performance. Library managers and policymakers must concentrate on human capital strategies that substantially raise the degree to which the innovation components are attained to acquire greater benefits from the implementation of innovation (Kafetzopoulos & Psomas, 2015). This can be accomplished by utilizing human capital initiatives such as training, seminars, coaching, mentorship, and hiring selectively which draws in knowledgeable, competent, and qualified employees and therefore, motivates them to make a great contribution to the library's innovation and, as a result, enhances employee performance (Alrowwad, Abualoush & Masa'deh, 2020).

## **6.3 Theoretical Implications**

This research has a lot of theoretical implications. To begin with, it is one of the first studies to investigate the relationship between human capital and employee job performance via the mediating influence of innovation capability, specifically in academic libraries in Southern Africa. Although other studies have looked at these characteristics in different contexts, the conceptual framework described in the study has been rarely looked at in academic libraries in the Southern African region, according to the researcher's knowledge. As a result, through the mediating role of innovation capability, this study empirically supports the link between human capital and employee job performance.

Secondly, this study contributes to the empirical relationship between human capital, and employee job performance and validates the human capital theory and the resource-based view arguments that allude to the fact that employees with greater human capital attain higher performance when conducting their job tasks (Barney and Wright 1998; Becker 1962). Also, this study makes a contribution to the empirical relationship between human capital and innovation capability and has empirically shown and confirmed the resource-based view assertion that an organization's ability to innovate is determined by its human capital resources (Barney 1991). The study also provides a detailed understanding of the relationship between different variables by conducting a dimension-level analysis of all constructs.

The findings of the study also provide empirical evidence on the relationship between human capital, innovation capability, and employee job performance. This study provides evidence that human capital works as a catalyst that enhances innovation in an organization which will ultimately result in improved performance. Furthermore, the study explains that an organization's ability to generate innovation is associated with the knowledge and competencies of its human capital. Hence, to guarantee that innovation occurs, organizations might leverage valuable and inimitable human capital to cultivate organizational expertise for developing new products and services which will subsequently lead to higher work performance.

Another implication of the research is that it combines several theories, such as the HCTand the RBV. The author constructed a framework for human capital, innovation capability, and employee job performance, as detailed in the literature section, and examined the relationship between them using these theories. As a result, the outcomes of this study give empirical evidence to back up the theories' concepts.

## 6.4 Limitations of the Study and Future Research

The current research also has some limitations. Firstly, this study focused only on three Southern African countries, namely Namibia, South Africa, and Zimbabwe, therefore findings may not be generalizable to all countries in Southern Africa region. Secondly, the study only concentrated on academic libraries and excluded other library sectors such as public, school, and special libraries, and therefore, the findings may not be transferrable to all library sectors, and this research may be inconsistent with the results of other library sectors. Thirdly, since these findings are focused on developing countries, they may not be generalizable to developed countries. Fourthly, the data was collected from only librarians and library assistants and excluded other library personnel and also library users, which might have caused some bias in the data. Even though the researchers analyzed the reliability, bias could not be eliminated.

Moreover, the study was based on individual staff perception and their actual performance and not on the overall performance of the libraries which could have skewed the results. Furthermore, another limitation is the use of selfreporting survey questionnaires. Although this method is especially useful for analyzing respondents' "perceptions' of project innovation, it has been linked to many sorts of information mistakes such as clemency, severity, internal consistency, and halo errors (Dulaimi, Ling & Bajaracharya, 2010). Additionally, the study made use of convenience non-probability sampling which restricted the entire population from being part of the study and therefore lacked clear generalizability.

To address the aforementioned limitations, this study offered a set of issues that can be researched further by various scholars in future studies. It is therefore proposed that future researchers conduct similar research in other library sectors to give a broader picture of all the library sectors. It is also recommended to expand the scope of the study by including other countries to generalize the results and findings. Future researchers could also extend this research by also examining the perceptions of other library personnel and also library users so that there is an accurate analysis since the research only focused on examining the perceptions of librarians and library assistants and excluded other library personnel and library users. Also, however even though the findings of the research revealed there was a strong correlation between human capital, innovation capability, and employee performance, future researchers could explore how this can impact the overall library performance.

Future research should also focus on analyzing managers' perceptions of their employees' performance to provide a highly consistent and accurate assessment and avoid employee self-report bias. Moreover, future researchers could make use of the probability sampling method to select participants so that every participant would have a fair chance of being selected and hence be able to generalize the findings. Future researchers may also perform a comparative analysis to have a broader understanding of how academic libraries in Namibia, South Africa, and Zimbabwe differ or relate in terms of their level of human capital, innovative activity, and job performance, therefore future researchers can use the comparative analysis to address the gaps identified as differences. The study recommends that collaborations can be done between libraries in Southern Africa, which could be achieved through link programs that can provide facilities to tap into each other's human capital capabilities whereby librarians can learn from each other.

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#### Appendices

#### Appendix A

#### Questionnaire

Dear sir/madam, I am conducting a research to investigate the effect of human capital on employee job performance through the mediating effect of innovation capability. Please rate your organization on the following questions from 1 to 7 where 1 represents strongly disagree and 7 represent strongly agree. Your responses will be kept confidential and will be used for the stated purpose, only. Your cooperation is highly appreciated.

## **Demographic details**

Gender: 1) Female 2) Male					
Age group: 1) 18-25       2) 26-30       3) 31-35       4) 36-40       5) 41-4	5	6)46-3	50		
Age group: 1) 18-25 2) 26-30       3) 31-35       4)36-40       5)41-45       6)46-50         7) 51 and above         Marital Status: 1) Single       2) Married       3) Divorced       4)Widow       5) Separated         Level of education: 1) High School 2) B.A in LIS       3) Post Graduate Diploma in LIS       4) Masters in LIS       5) Doctorate in LIS       5) Others         Nationality: 1) Namibian       2) South African       3) Zimbabwean       4) Others         Job status: 1) Librarian       2) Deputy Librarian       3) Principal Librarian         4) Senior Librarian       2) Deputy Librarian       5) Library Assistant         Years of work experience in the current library: 1) 1-5 years       2) 6-10 years       3) 11-15 years         4) 16-20 years       5) 21 years or more         Location of your library: 1) Namibia       2) South Africa       3) Zimbabwe         a) Namibia       b) South Africa       3) Zimbabwe         b) South Africa       c) Zimbabwe         Particulars       SD       DA       N       AG       SA         My competences matches with my work requirements and       1       2       3       4       5					
Marital Status: 1) Single2) Married3) Divorced4)Widow	5) Se	parate	d		
Level of education: 1) High School 2) B.A in LIS 3) Post Graduate Dipl	oma i	n LIS			
4) Masters in LIS 5) Doctorate in LIS 5) Others					
Nationality:1) Namibian2) South African3) Zimbabwean	4) Ot	hers			
Job status: 1) Librarian 2) Deputy Librarian 3) Principal Librarian					
4) Senior Librarian 4) Assistant Librarian 5) Library Assis	stant				
Years of work experience in the current library: 1) 1-5 years 2) 6-10 year	rs 3)	11-15	yea	rs	
4) 16-20 years 5) 21 years	ars or	more			
Location of your library: 1) Namibia2) South Africa3) Zim	babwe	e			
a) Namibia					
b) South Africa					
c) Zimbabwe					
Particulars	SD	DA	N	AG	SA
Training and Education	1	2	3	4	5
• • • •	1	2	3	4	5
We undergo continous training programs every year.	1	2	3	4	5
I contiously learn from others (colleagues and outsiders).	1	2	3	4	5

The library devotes a lot of time and effort to update and develops employees knowledge and skills.	1	2	3	4	5
I consider myself intelligent	1	2	3	4	5
I am considered the best employee in our library organization.	1	2	3	4	5
I am an expert in my respective area.	1	2	3	4	5
Experience and Skills					
I consistently perform at my best.	1	2	3	4	5
I give my all when I am performing my duties.	1	2	3	4	5
I have worked for many years in the current Library and Information Service.	1	2	3	4	5
I am highly professional.	1	2	3	4	5
Leadership and Motivation					
I constantly do my best.	1	2	3	4	5
I possess leadership skills.	1	2	3	4	5
I evaluate my actions.	1	2	3	4	5
I generally perform tasks with a lot of energy.	1	2	3	4	5
Service and Technological Innovation Capability					
We always focus on ways to satisfy user needs.	1	2	3	4	5
We provide user-friendly interface (OPAC, website, etc.) to meet user needs	1	2	3	4	5
New services are provided through mobile apps or mobile website.	1	2	3	4	5
We provide an effective presence in social media (Facebook, Twitter, etc.)	1	2	3	4	5
We have an excellent service delivery system (automated circulation, inter-library loan, online reference, etc.)	1	2	3	4	5
We use state-of-the-art technology (RFID, QR code, digital library, etc.)to provide services.	1	2	3	4	5
We are always quick in coming up with novel ideas or services for library users.	1	2	3	4	5
Our services are often perceived as very novel and relevant by our users.	1	2	3	4	5
We provide consultancy.	1	2	3	4	5
We provide user-centered services.	1	2	3	4	5
Organizational Innovation Capability					
Our library makes use of databases of best practices, lessons and other knowledge.	1	2	3	4	5
Our library uses implementation of practices for employee development and better work retention.	1	2	3	4	5
Our library makes use of quality management systems.	1	2	3	4	5

Our library employs decentralization in decision making.	1	2	3	4	5
Our library makes use of inter-functional working groups.	1	2	3	4	5
Our library provides flexible job responsibilities.	1	2	3	4	5
Our library collaborates with library users.	1	2	3	4	5
Our library uses methods for intergration with suppliers.	1	2	3	4	5
Marketing Innovation Capability					
It is important for our library to make changes in appearances, packaging and shape and volume of our products and services	1	2	3	4	5
Our library constantly looks for new ways to deliver our information and services to our customers.	1	2	3	4	5
Our library implement new marketing methods to promote our services.	1	2	3	4	5
Our library make improvements in the manner of customer relationships to obtain customer satisfaction.	1	2	3	4	5
New ideas that come from customers and suppliers are evaluated contionously, and we try to include them into product development activities.	1	2	3	4	5
Task Performance	1	2	2	4	_
I am able to complete my job tasks.	1	2	3	4	5
I am able to produce quantity work.	1	2	3	4	5
I am able to produce quality work.	1	2	3	4	5
I am skilled in how do to my job.	1	2	3	4	5
I am knowledgeable about my job.	1	2	3	4	5
I am able to update my knowledge and skills.	1	2	3	4	5
I am able to work accurately and neatly.	1	2	3	4	5
I am able to plan and organize the library services.	1	2	3	4	5
I partcicipate in the library adminstration.	1	2	3	4	5
I participate in library decision making.	1	2	3	4	5
I am able to solve problems that occurs from their job.	1	2	3	4	5
I am able to write and communicate orally.	1	2	3	4	5
I am able to monitor and controll library resources.	1	2	3	4	5
Contextual Performance					
I am able to persist with enthusiasm and extra effort which is necessary to complete my own task successfully	1	2	3	4	5
I show initiative on the job.	1	2	3	4	5
I am attentive towards my duty.	1	2	3	4	5
I am resourceful in accomplishing tasks	1	2	3	4	5
I am industrious in accomplishing tasks	1	2	3	4	5

I am motivated to do my job.	1	2	3	4	5
I am able to dedicate myself on duty.	1	2	3	4	5
I am proactive and creative on the duty.	1	2	3	4	5
I am able to cooperate and help others.	1	2	3	4	5
I am able to deal with others politely.	1	2	3	4	5
I communicate effectively on the job.	1	2	3	4	5
I am able to cultivate and mantain interpersonal relations.	1	2	3	4	5
I am committed to the library.	1	2	3	4	5
Adaptive Performance					
I keep my job knowledge up-to-date.	1	2	3	4	5
I keep their job skills up-to-date.	1	2	3	4	5
I demonstrate flexibility.	1	2	3	4	5
I am able to cope well with difficult situations and set backs at work.	1	2	3	4	5
I am able to recover fast, after difficult situations or setbacks at work.	1	2	3	4	5
I am able to come up with new solutions to new problems.	1	2	3	4	5
I am able to cope well with uncertain and unpredictable situations at work.	1	2	3	4	5
I am able to easily adjust to changes in their work place.	1	2	3	4	5

#### **APPENDIX B**

#### **Ethical Clearance Letter**

YAKIN DOĞU ÜNİVERSİTESİ BİLİMSEL ARAŞTIRMALAR ETİK KURULU

03.03.2020

Dear Tinotenda Chiganze

Your application titled **"Relationship between librarian's human capital and librarian's work performance: A mediating effect of inovation capability in Southern Africa"** with the application number YDÜ/SB/2020/636 has been evaluated by the Scientific Research Ethics Committee and granted approval. You can start your research on the condition that you will abide by the information provided in your application form.

Assoc. Prof. Dr. Direnç Kanol

Rapporteur of the Scientific Research Ethics Committee

Direnc Kanol

**Note:** If you need to provide an official letter to an institution with the signature of the Head of NEU Scientific Research Ethics Committee, please apply to the secretariat of the ethics committee by showing this document.

## Appendix C

## **Turnitin Similarity Report**

Thesis	
ORIGINALITY REPORT	
14% 10% 9% 6% STUDENT	PAPERS
PRIMARY SOURCES	
1 www.tandfonline.com Internet Source	1 %
2 docs.neu.edu.tr Internet Source	1 %
3 journals.sagepub.com	1 %
4 repository.nwu.ac.za	<1%
Barkata Waseem, Beh Loo-See, Ahmed Adeel, Ahmed Riaz. "Impact of intellectual capital on innovation capability and organizational performance: An empirical investigation", Serbian Journal of Management, 2018 Publication	<1%
6 WWW.Scirp.org	<1%
7 Submitted to CVC Nigeria Consortium Student Paper	<1%
8 www.manlibnet.in Internet Source	

#### **APPENDIX D**

#### **Permissions Regarding use of Scales**

Dear Tinotenda Chiganze,

We appriciate you for your interest to our study.

Of course you can use the questionnaire. While using, Please cite as "Calik, E., Calisir, F., & Cetinguc, B. (2017). A scale development for innovation capability measurement. Journal of Advanced Management Science Vol, 5(2)" or other style you want.

Thank you for your kindly permission request.

Best Regards,

Dr.Öğr. Üyesi Eyüp Çalık Yalova Üniversitesi Endüstri Mühendisliği Bölümü

# 08:35 ≜ researchgate.net

How are you? Hope i find you well. My name is Tinotenda Chiganze. I am PhD Candidate at Near East University, in North Cyprus. I am kindly requesting your permission to adapt your job performance questionnaire for my thesis, that you used in your study, "Demographics Variables and Job Performance of Librarians in University Libraries in South East Nigeria". I would also like to adapt your library service innovation measurement scale for my thesis that you used in your study, "The Role of Knowledge Management In Providing Innovative Services In University Libraries In Nigeria."

I will be looking forward to hear from you soon.

Yours Sincerely,

Tinotenda Chiganze

Cyprian Ifeanyi Ugwu to you

12 hours ago

Dear Chiganze. Thank you for your special interest in my articles. This to inform you that you have my permission to adapt both



< PERMISSION TO USE QUESTIONNAIRE						
Dear Sir/Madam						
How are you? Hope i find you well. My name is Tinotenda Chiganze. I am PhD Candidate at Near East University, in North Cyprus. I am kindly requesting for your permission to adapt your human capital measurement scale for my thesis, that you used in your study, "A Human Capital Measurement Scale."						
I will be looking forward to hear from you soon.						
Yours Sincerely,						
Tinotenda Chiganze						
<a>···</a>						
Reply More						
juarezvidotto To Tinotenda Chiganze Today at 01:30						
I agree. No problem.						
Juarez D F Vidotto						

#### 1. Name Surname: TINOTENDA CHIGANZE

#### 2. Date of Birth: 05/11/1990

## **3. Title:** Tinotenda Chiganze MSc.

#### 4. Education:MASTERS

Degree	Field	Univeristy	Year
Bacheloratte	Psychology	University of Venda	2010-2014
Master	General Psychology	NEU	2015-2016
Ph.D.	Innovation & Knowledge Management	NEU	2016-2022

#### 5. Titles: Msc

#### 6. Publications

#### 6.1 Articles Published in International Journals

## 6.2. Papers Submitted in International Scientific Meetings

## 6.3. Books/Books Chapters

6.4. Articles Published in National Journals

## 6.6. Awards

## 7. Lectures Given In the Last Two Years

Academic	Semester	COURSE	Lecture Hours	
Year			Theory	Practical
2020-		NURS 141 Information Management in Nursing	2	
2021		Ι		
	Fall			
	Spring	NURS 142: Information Management in	2	
		Nursing II		
		IMN 202: Information Management in Nutrition		
		Science & Dietetitics		
2021-22	Fall	NURS 141 Information Management in Nursing	2	
		Ι		