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Relationship between Human Capital, Innovation Capability and Employee Job Performance in Academic Libraries in Namibia, South Africa, and Zimbabwe

https://doi.org/10.1515/libri-2021-0037
Published online June 30, 2022

Abstract: 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. Further, it also explored the effect of innovation capability on employee job performance in academic libraries 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 the Southern Africa Region which incorporates three countries, namely Namibia, South Africa, and Zimbabwe. Data were analyzed using SPSS v.23. 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. The major limitation of the study is that it focused only on three Southern African countries, namely Namibia, South Africa, and Zimbabwe. Additionally, the study only concentrated on academic libraries and excluded the other types of libraries such as public, school, and special libraries. 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.

Keywords: academic libraries, employee job performance, human capital, innovation capability, librarians

1 Introduction

Human capital is regarded as the most significant intangible or knowledge-based asset that supports an organization's value-added practices (Mushi 2010, 12). This notion is reinforced by Drucker (1999, 79) who implied that the "most important asset of the 21st-century organization would be its human resources and how competently and efficiently they perform their roles." This view is also supported by Kostagiolas (2013, 678) who opined that human capital has become an essential component for libraries promoting innovation and authentic developments in their operations and services. Correspondingly, Idiegbeyan-Ose et al. (2019, 1) 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 encompasses employee's education, training, professional skills, expertise, adaptability skills, ability to work in a group, and commitment to the objectives and strategies of the library (Corrall and Sriborisutsakul 2010, 10). 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 and Tsoubrakakou 2014, 629).

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 and Singh 2019, 1). Furthermore, employee job performance is defined as the execution of mandatory responsibilities or activities based on the employees' expertise. These mandatory duties are tailored towards the achievements of the objectives of an organization (Saka and Salman 2014, 27). In other words, Amusa, Iyoro, and Olabisi (2013, 460) reiterated that the job performance of library

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personnel is an aspect of their job manners which is relevant to the success of the library. Human capital is also critical in the development of innovation capabilities among employees (Yen 2014, 123). Correspondingly, human capital is seen as a stimulus that increases the capacity of employees to innovate in an organization (Waseem et al. 2018, 374).

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 and Pak 2016, 117). Additionally, innovation capability is described as an organization's ability to propose and implement new strategies to the market (Nisula and Kianto 2013, 62), thus leading to enhanced service delivery and improved employee performances (Sadikoglu and Zehir 2010, 23).

Despite the value of human capital and its crucial role on employee performance, little research has been done to examine the effect of human capital on workers' performance in a library context (Asonitis and Kostagiolas 2010; Lo and Stark 2020; White 2007). There is a research gap in exploring how human capital affects workers' performance in developing nations (Dhar, Mutalib, and Sobhani 2019, 7074). 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, and Jaafar 2016, 401). Hence, the primary goal of this study is to establish the effect of human capital on innovation capability and workers' performance in academic libraries across Namibia, South Africa, and Zimbabwe.

2 Research Questions

1. What is the level of human capital in academic libraries in Namibia, South Africa, and Zimbabwe?
2. What is the degree of innovation capability in academic libraries in Namibia, South Africa, and Zimbabwe?
3. What is the level of employee job performance in academic libraries in Namibia, South Africa, and Zimbabwe?
4. What are the relationships between human capital, innovation capability, and employee job performance in academic libraries in Namibia, South Africa, and Zimbabwe?
   - 4a. What are the relationships between human capital and innovation capability in academic libraries in Namibia, South Africa, and Zimbabwe?
   - 4b. What are the relationships between human capital and employee job performance in academic libraries in Namibia, South Africa, and Zimbabwe?
   - 4c. What are the relationships between innovation capability and employee job performance in academic libraries in Namibia, South Africa, and Zimbabwe?

3 Theoretical Foundation and Literature Review

The theoretical foundation for this study is the human capital theory and the resource-based view. 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, and Khavenson 2019, 394). 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, 900). 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 and Honig 2003; Hsu and 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 (Wernefelt 1984, 173). 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 and 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, 108). 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, 869). Therefore, this study uses the human capital theory and the resource-based view to illustrate the relationship between human capital, innovation capability, and employee performance, as well as the relationship between innovation capability and employee performance.

3.1 Concept of Human Capital

The concept of human capital stems from the 1960s when the economists Schultz (1961, 2) and Becker (1962, 9) initiated the formalization of the "human capital theory" to show how individuals' investment in themselves was similar to organizations' investments in physical capital. According to the human theory, human capital refers to "investment in education, training, skills, health, and other virtues that can not be detached from the individual" (Becker 1962; Schultz 1961). Human capital is related to the knowledge, experiences, skills, innovativeness, and actions of employees (Edvinsson and Stenfelt 1997, 31). Human capital constitutes the human features within an organization which comprises a mixture of abilities, training and education, and expertise that produces the character of an individual (Bontis et al. 1999, 393).

Human capital is outlined as employees' professional skills, leadership capacity, innovativeness, and ability to address problems (Salehi, Enayati, and Javadi 2014, 260). Moreover, human capital indicates employees' insightfulness, ideals, tactics, abilities, knowledge, expertise, experiences, competencies, education, dedication, creativeness, adaptability, and learning capacity (Inkinen 2015, 522). The human capital dimensions adapted in the current study include training and education, experience and skills, and leadership and motivation (Sharabati, Jawad, and Bontis 2010; Vidotto et al. 2017).

3.2 Concept of Innovation Capability

From a resource-based view, 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, and Domeher 2016; Lawson and Samson 2001). Additionally, according to the resource-based view 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 and Calantone 2002; Harmancioglu, Droge, and Calantone 2009). Furthermore, Pedron et al. (2018, 496) describe innovation capability as the method of employing a novel idea or notion for a product, service, business model, or procedure that will produce or increase the worth of an organization. According to Grabner, Posch, and Wabnegg (2018, 66), innovation capability is characterized as the capacity of an organization to develop new solutions to satisfy the present and future expectations of consumers. Rajapathirana and Hui (2018, 46) viewed innovation capability as the implementation of an entirely new product or service to the organization or redevelopment or enhancement of existing services.

The innovation capability dimensions adapted in the study include service innovation, organizational innovation, technological innovation, and marketing innovation (OECD 2005, 53–56). Service Innovation in libraries denotes new or modified technology applications, upgraded facilities, approaches, and other ongoing work for the satisfaction of library users (Islam, Agarwal, and Ikeda 2017, 270). According to OECD (2005, 55), organizational innovation is characterized as the introduction of new structures, processes, administrative, and external relationships by organizations to facilitate their innovation efforts. Technological innovation in libraries is portrayed as the application of modern technologies to provide users with excellent and effective services such as the incorporation of the (radio frequency identification) RIFD system (Gupta and Margam 2017, 59). Elsewhere, marketing innovation in libraries is described as an adaption of current trends in advertising and promoting services, resources, activities, collections, and products. For instance, the use of social media tools such as Facebook to get in touch with library users and to make library programs and services accessible (Khan and Bhatti 2012, 3).

3.3 Concept of Employee Job Performance

Employee job performance is defined as the employee's aptitude in executing tasks that are stipulated in their job description (Kappagoda 2018, 161). Correspondingly, employee job performance represents the degree to which an individual accomplishes their duties stated in their job description. This consists of the completion of their responsibilities and execution of their activities required for the job position (Nwokike and Unegbu 2019, 6). Okolie and Kawedo (2018, 10) viewed employee job performance as the ability of employees to tactfully perform their designated duties for organizational effectiveness. Ojo (2009, 389) described employee job performance as the degree to which employees conduct their everyday work. The present study takes the following employee job performance dimensions from the studies of Koopmans et al. (2013) and Nwokike and Unegbu (2019):

- **Task performance** encompasses the duties that are carried out by a librarian as part of their work. It refers to a librarian's capacity to carry out central duties that are essential to the job.

- **Contextual performance** involves those actions that a librarian is expected to implement that are not limited to a specific work. It refers to a librarian's ability to execute duties or activities that are not essential for their specific job.
- **Adaptability performance** is characterized as task performance-oriented behaviors that individuals endorse in response to or in anticipation of changes that apply to work-related tasks. It is, for instance, a librarian's capability to adapt to the evolving needs and requirements of library users.

3.4 Human Capital and Innovation Capability

According to the resource-based view, 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. These employees are also the most adaptable in developing new skills, which increases the firm's innovativeness (Cabello-Medina, Lopez-Cabreles, and Valle-Cabrera 2011, 810). Sa'ari, Idrus, and Jaafar (2016, 401) 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. According to Farace and Mazotta (2015, 29) human capital features, such as experience, training, and education level, significantly raise the inclination of employees to innovate in an organization. Similarly, Dakhli and De Clercq (2004, 123) 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, 1086) 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 et al. (2012, 226) 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. However, according to Bekana (2019, 669), 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.

3.5 Human Capital and Employee Job Performance

According to human capital theory, human capital signifies an employee's capabilities and personal attributes that make them efficient when performing their tasks (Becker 1962, 12–15). Likewise, the resource-based view 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, resulting in an increased quantity of work and excellent work performance (Wright, McMahan, and McWilliams 1994, 313). Sari (2015, 287) stated that human capital enables employees to produce quality and quantity work and accomplish their job tasks promptly which translates to improved work performance. Katuli-Munyoro and Mutula (2016, 138) asserted that human capital is the most valuable resource that is integral in improving the work performance of library professionals and leads to the effective and efficient delivery of LIS curricula. Asonitis and Kostagiolas (2010, 155) 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 their work performance.

White (2007, 114) stated that human capital enhances library professionals planning procedures, as well their ability to make good decisions and perform effectively, resulting in an overall improvement of their work performance. Lo and Stark (2020, 6) 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. 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 2014, 113). 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.

3.6 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 and Cemberci 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; Harmancioglu, Droge, and Calantone 2009). Sadikoglu and Zehir (2010, 23) 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, 13) found that organizations with the propensity to innovate enabled employees to perform their duties efficiently and successfully, thereby increasing their productivity and ultimately enhancing their work performance.

Obeng and Mkhize (2017, 17–18) 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, 371) noted that innovation enables employees to effectively and efficiently manage their work and to achieve better performance. Also, according to Garcia-Morales, Ruiz-Moreno, and Llorens-Motes (2007, 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. Nonetheless, as mentioned by Mabenge, Ngorora-Madzimure, and Makanyeza (2020, 19), 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 in libraries, where research is scarce in this area and it is hypothesized as follows.

4 Methodology

4.1 Research Framework and Hypotheses

As indicated in Figure 1, the research framework was derived from the principles of the human capital theory and resource-based view and reviewing the literature. According to the literature review, human capital influences employees' innovation capabilities and leads to their job performance. Furthermore, several studies have suggested that innovation capability is heavily dependent on human capital and that all innovation processes are initiated by employees who are the human capital. As a result, we hypothesized that if human capital can assess employees' performance in their workplace, then the employees' capabilities to innovate would have an impact on their performance in the library. Consequently, three research hypotheses were established in this study to objectively determine the association between human capital, innovation capability, and employee job performance in academic libraries in Namibia, South Africa, and Zimbabwe. The following are the proposed hypotheses:

H1: Human capital has a significant and positive effect on innovation capability in academic libraries.

H2: Human capital has a significant and positive effect on employee job performance in academic libraries.

H3: Innovation capability has a significant and positive effect on employee job performance in academic libraries.

4.2 Research Design

The researcher adopted a survey research design to explain and interpret the current relationships among human capital, innovation capability, and job performance of library employees. Also, a survey was used because of the wide area covered. Busha and Harter (1980, chap. 3) noted that library researchers utilized a survey research design to evaluate the associations between variables and draw inferences about library and information circumstances.

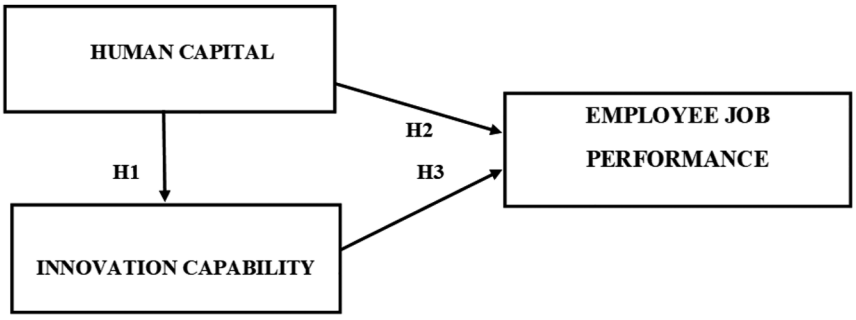

Figure 1: Research framework.

4.3 Population and Sampling Method

The study's target population included librarians, deputy librarians, principal librarians, senior librarians, assistant librarians, and library assistants from academic libraries from Namibia, South Africa, and Zimbabwe. These groups were targeted because of their knowledge, competencies, experiences, duties, and interest in the problem of the study. Convenience, non-probability sampling was used to select all the librarians and library assistants since it was effortless and uncomplicated to obtain the details of the sample through the information provided on their mailing list, which was available on their library database (Etikan, Musa, and Alkassim 2016, 2).

Online survey questionnaires were used to gather data which facilitated the researcher to obtain anonymous and confidential data cheaply from a vast and geographically scattered population and also allowed the researcher to accumulate responses in a systematic format (Pickard 2007, 111). A total of 580 individual emails with a link to an online questionnaire with an attached informed consent were distributed to academic librarians and library assistants through emails inviting them to participate in the study after receiving ethical clearance and authorization from the library directors. In total, 387 participants completed the questionnaire. Since the survey was anonymous, it was difficult to identify how many of the responses were from the individual emails. As a result, obtaining an actual number for each academic library's response rate was challenging. Data were collected over a period of seven months (April to October 2020). The list of the academic libraries that were involved in this research is summarized in Table 1 below:

Table 1: Namibian, South African, and Zimbabwean academic libraries that were involved in this research.

Academic libraries	Country
International University of Management	Namibia
Namibia University of Science and Technology	Namibia
University of Namibia	Namibia
Durban University of Technology	South Africa
Rhodes University	South Africa
Sefako Makgatho Health Sciences University	South Africa
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 Technology	Zimbabwe
Great Zimbabwe University	Zimbabwe
Harare Institute of Technology	Zimbabwe
Harare Polytechnic	Zimbabwe
Marondera University of Agricultural Science and Technology	Zimbabwe
Midlands State University	Zimbabwe
National University of Science and Technology	Zimbabwe
Solusi University	Zimbabwe
University of Zimbabwe	Zimbabwe
Zimbabwe National Defense University	Zimbabwe
Zimbabwe Open University	Zimbabwe

$n = 387$.

4.4 Research Measuring Instrument

4.4.1 Social Demographic Questionnaire

A socio-demographic questionnaire prepared by the researcher was used to obtain the socio-demographic characteristics of the employees. The questionnaire asked the participants to provide information on their gender, age, marital status, level of education, nationality, position or rank in the library, years of work experience in the library, and location of the library.

4.4.2 Human Capital Measurement Scale

The study adopted the human capital measurement scale (HCMS) from Sharabati, Jawad, and Bontis (2010) and Vidotto et al. (2017). The HCMS is an individual assessment questionnaire consisting of 16 items that assess the employees' human capital based on six dimensions: training, education, experience, skills, leadership, and motivation. The participants rated their thoughts on a 5-point Likert-type scale, where one signified strongly disagree and five denoted strongly agree.

4.4.3 Individual Work Performance Questionnaire

The study adopted an individual work performance questionnaire (IWPQ) from Koopmans et al. (2013). The IWPQ is an individual assessment questionnaire consisting of 34 items that evaluate employees' work performance. The questionnaire is segmented and categorized into three components: task performance, contextual performance, and adaptive performance. The participants assessed their views on a 5-point Likert scale, where one denoted strongly disagree and five signified strongly agree.

4.5 Innovation Capability Scale

To measure the library's innovation capabilities, three dimensions were used: organizational innovation, service and technological innovation, and marketing innovation.

4.5.1 Organizational Innovation Capability Scale

The study adopted the organizational Innovation capability scale from (OECD 2005). The organizational innovation capability scale is a nine-item scale that assesses an organization's ability to facilitate innovation by introducing new strategies, practices, internal, and external associations. Respondents were asked to rate the innovation practices and actions happening in their organization on a 5-point Likert-type scale, where one signified strongly disagree and five denoted strongly agree.

4.5.2 Service and Technological Innovation Capability Scale

Item measures for service and technological innovation capability in the library were implemented from Islam, Arwal, and Ikeda (2017). All items were rated on a 5-point Likert-type scale, where one denoted strongly disagree and five signified strongly agree.

4.5.3 Marketing Innovation Capability Scale

The study adopted a marketing innovation capability scale from Calik, Calisir, and Cetinguc (2017) and OECD (2005). The marketing innovation capability scale is a five-item scale that assesses an organization's implementation of a new marketing technique. All items were rated on a 5-point Likert-type scale, where one signified strongly disagree and five denoted strongly agree.

5 Data Analysis

Statistical Package for Social Sciences v.23 (SPSS) was employed to analyze the data gathered from the questionnaires using statistical analysis methods such as descriptive analysis and regression analysis. Reliability analysis was also conducted to confirm the regularity of the research questionnaires to ensure that similar results were again achieved by the participants under investigation (Field 2013, 706). Also, validity analysis was performed to see how well the questionnaire evaluates what it is intended to measure (Yu and Chen 2015, 5).

5.1 Reliability and Validity Analysis of the Questionnaire

The present research work performed reliability and validity analysis to examine the fitness of the research instrument, following the recommendation of Hair et al. (2010) (Table 2). The composite reliability scores and the Cronbach's alpha measure were used to evaluate the measurement construct's consistency. The results in Table 2 indicate that all the composite reliability scores range from 0.738 to 0.923 and Cronbach's alpha values vary from 0.701 to 0.924 representing good reliability.

Table 2: Reliability analysis of the questionnaire.

Construct	Items	Composite reliability	Cronbach's alpha
Human Capital	16	0.883	0.872
Training and Education	7	0.846	0.786
Experience and Skills	4	0.738	0.701
Leadership and Motivation	5	0.761	0.755
Innovation Capability	23	0.923	0.924
Service and Technological Innovation	10	0.913	0.901
Organizational innovation	8	0.820	0.805
Marketing innovation	5	0.755	0.739
Employee Performance	34	0.920	0.913
Task Performance	13	0.853	0.837
Contextual Performance	13	0.802	0.833
Adaptive Performance	13	0.759	0.781

n = 387.

According to Cohen (1988, chap. 4), a Cronbach's alpha value should be at least 0.70. Hence, our research instrument meets the internal consistency assumption. After the reliability was confirmed, the researcher analyzed the validity. The researcher adapted scales and items that had already been created and used by other researchers with common interests, to ensure content validity, which refers to how well the questionnaire assesses what it is supposed to measure (Yu and Chen 2015, 5). Also, the questionnaire was given to three experts in Library and Information Research and it was amended based on their ideas and recommendations. As a result, the instrument was determined to have both face and content validity, making it a valid instrument for use in this study.

5.2 Socio-Demographic Characteristics of Participants

Table 3 indicates that eight (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 five (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%) 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%) 1–5 years, 171 (44.2%) 6–10 years, 50 (12.9%) 11–15 years, 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 and 10 years. The location of the library of the participants indicates that 104 (26.9%) of the participants 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 participants were located in Zimbabwe.

Table 3: Frequency distribution of participants according to socio-demographic characteristics.

Variable	Category	Frequency (n)	Percentage (%)
Level of Education	High School	8	2.1
	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
Nationality	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	1–5 years	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 Library	Namibia	104	26.9
	South Africa	121	31.3
	Zimbabwe	162	41.8

n = 387

Table 4: Level of human capital in academic libraries.

Rank	Human capital dimensions	Mean	Average
	Leadership and Motivation		
1	I evaluate my actions.	4.19	4.14
2	I learn from other colleagues.	4.16	
3	I constantly do my best.	4.16	3.98
4	I usually put a lot of effort into my work.	4.12	
5	I possess leadership skills.	4.06	
	Experience and Skills		
1	I give my all when I am performing my duties.	4.11	
2	I consistently perform at my best.	4.10	
3	I am highly professional.	4.08	
4	I have worked for many years in the current library and information service.	3.62	
	Training and Education		
1	I consider myself intelligent.	4.17	3.79
2	My competencies match my work requirements and responsibilities.	4.07	
3	I continuously learn from others.	4.04	
4	I am an expert in my respective area.	4.01	
5	The library devotes a lot of time and energy updating and developing employees' skills and abilities.	3.50	
6	We undergo continuous training programs every year.	3.25	
7	I am considered the best employee in our library organization.	3.25	
Overall		3.97	

n = 387.

5.3 Descriptive Analysis

Tables 4, 5, and 6 show the descriptive analysis for human capital, innovation capability, and employee job performance and their dimensions.

5.3.1 Level of Human Capital in Academic Libraries

Table 4 shows that the level of human capital in academic libraries in Namibia, South Africa, and Zimbabwe was high (mean = 3.97) 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), followed by experience and skills (mean = 3.98), and training and education (mean = 3.79). 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

Table 5: Degree of innovation capability in academic libraries.

Rank	Innovation capability dimensions	Mean	Average
	Marketing Innovation		
1	Our library needs to make changes to the appearances, packaging, shape, and volume of our products and services.	4.12	4.04
2	Our library makes improvements in the manner of user relationships to obtain user satisfaction.	4.09	
3	New ideas that come from users and suppliers are evaluated continuously, and we try to include them in product development activities.	4.06	
4	Our library constantly looks for new ways to deliver our information and services to our users.	4.04	
5	Our library implements new marketing methods to promote our services.	3.91	
	Organizational Innovation		
1	Our library collaborates with library users.	4.20	4.01
2	Our library provides flexible job responsibilities.	4.09	
3	Our library makes use of databases of best practices, lessons, and other knowledge.	4.09	
4	Our library makes use of inter-functional working groups.	4.08	
5	Our library uses methods for integration with suppliers.	4.05	
6	Our library makes use of quality management systems.	4.00	
7	Our library uses an implementation of practices for employee development and better worker retention.	4.00	
8	Our library employs decentralization in decision-making.	3.59	
	Service and Technological Innovation		3.76
1	We always focus on ways of satisfying library user needs.	4.20	
2	We provide user-centerd services.	4.10	
3	We provide consultancy.	3.98	
4	Our services are often perceived as very novel and relevant by our library users.	3.96	
5	We are always quick in coming up with novel ideas or services for library users.	3.86	
6	We have an excellent service delivery system (automated circulation, inter-library loan, online reference, etc.).	3.65	
7	We use state-of-the-art technology (RFID, QR code, digital library, etc.) to provide services.	3.61	
8	We provide a user-friendly interface (OPAC, website) to meet user needs.	3.61	
9	New services are provided through mobile apps or mobile websites.	3.46	
10	We provide an effective presence on social	3.19	
Overall	media (Facebook, Twitter, etc).	3.93	

n = 387

Table 6: Employee job performance levels in academic libraries.

Rank	Employee job performance dimensions	Mean	Average
	Contextual Performance		
1	I am industrious in accomplishing tasks.	4.29	4.23
2	I am resourceful in accomplishing tasks	4.28	
3	I am attentive towards my duty.	4.25	
4	I communicate effectively on the job.	4.25	
5	I am proactive and creative on duty.	4.25	
6	I am able to dedicate myself to duty.	4.24	
7	I show initiative on the job.	4.23	
8	I am motivated to do my job.	4.23	
9	I am able to cultivate and maintain interpersonal relations.	4.22	
10	I am able to cooperate and help others.	4.22	
11	I am able to deal with others politely.	4.20	
12	I am able to persist with enthusiasm and extra effort, which is necessary to complete my tasks successfully.	4.20	
13	I am committed to the library.	4.14	
	Adaptive Performance		
1	I am able to easily adjust to changes in my workplace.	4.24	4.17
2	I am capable of devising novel answers to fresh problems.	4.22	
3	I keep my job knowledge up-to-date.	4.17	
4	I am able to deal well with ambiguous and unforeseen circumstances at work.	4.17	
5	I am able to deal effectively with complex circumstances and obstacles at work.	4.16	
6	I keep my job skills up-to-date.	4.14	
7	I demonstrate flexibility.	4.13	
8	I am able to recover fast from difficult work situations.	4.13	
	Task Performance		
1	I am able to write and communicate orally.	4.24	
2	I am able to work accurately and neatly.	4.24	
3	I am knowledgeable about my job.	4.22	4.10
4	I am able to complete my job tasks.	4.21	
5	I am able to update my knowledge and skills.	4.21	
6	I am skilled in how to do my job.	4.20	
7	I am able to monitor and control library services.	4.19	
8	I am able to plan and organize library services.	4.19	
9	I am able to produce quality work.	4.18	
10	I am able to solve problems that arise from my job.	4.14	
11	I am able to produce quantity work.	4.05	
12	I participate in the library administration.	3.65	
13	I participate in library decision-making.	3.57	
Overall		4.17	

n = 387

influenced their leadership and motivation were that library personnel evaluated their actions (mean = 4.19), the library personnel constantly did their best (mean = 4.16), and library personnel learned from other colleagues (mean = 4.16).

Under experience and skills elements, it was revealed that library personnel gives their all when performing duties (mean = 4.11), library personnel consistently perform at their best (mean = 4.10), and library personnel viewed themselves as highly professional (mean = 4.08).

For training and education, library personnel considers themselves to be intelligent (mean = 4.17), their competencies match with their work requirements and responsibilities (mean = 4.07), and library personnel continuously learn from others (mean = 4.04).

5.3.2 Degree of Innovation Capability in Academic Libraries

Table 5 shows that the degree of innovation capability in academic libraries in Namibia, South Africa, and Zimbabwe was high (mean = 3.93) 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), followed by organizational innovation (mean = 4.01), and service and technological innovation (mean = 3.76). 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), the library makes improvements to its relationships to obtain user satisfaction (mean = 4.09), and those new ideas that come from users and suppliers are evaluated continuously and are included in product development activities (mean = 4.06).

Under organizational innovation, it was revealed that the library collaborates with library users (mean = 4.20), the library provides flexible job responsibilities (mean = 4.09), and the library makes use of archives of quality standards, lessons, and other information (mean = 4.09).

For service and technological innovation, the library always focuses on ways of satisfying library user needs (mean = 4.20), the library provides user-centerd services (mean = 4.10), and the library provides consultancy (mean = 3.98).

5.3.3 Employee Job Performance in Academic Libraries

Table 6 reveals that the overall level of employee job performance in academic libraries in Namibia, South Africa, and Zimbabwe was high (mean = 4.17) on a 5-point scale. For all the dimensions assessed, contextual performance had the highest (mean = 4.23), followed by adaptive performance (mean = 4.17), and task performance (mean = 4.10). 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 = 4.29), resourceful in accomplishing tasks (mean = 4.2), and were attentive towards their duties (mean = 4.25).

Under adaptive performance, it was revealed that library personnel can easily adjust to changes in their workplace (mean = 4.24), can devise novel answers to fresh problems (mean = 4.22), can keep their job knowledge up-to-date (mean = 4.17), and can deal well with ambiguous and unforeseen circumstances at work (mean = 4.17).

For task performance, it was shown that library personnel can write and communicate orally (mean = 4.24), can work accurately and neatly (mean = 4.22), and are knowledgeable about their job (mean = 4.21).

5.4 Relationship Between Human Capital, Innovation Capability, and Employee Job Performance in Academic Libraries

A simple regression analysis was utilized, to evaluate the study's hypotheses. The result in Table 7 indicates that human capital (HC) has a significant and positive effect on innovation capability (IC) ($\beta = 0.694$, $p < 0.05$). Also, HC has a significant and positive effect on employee job performance (EJP) ($\beta = 0.689$, $p < 0.05$). Furthermore, IC has a significant and positive effect on EJP ($\beta = 0.620$, $p < 0.05$). The hypothesized relationships between human capital, innovation capability, and employee job performance are statistically supported based on these findings. The findings also demonstrate that the essence of their relationship is positive and that the strength of their relationship is strong.

6 Discussion

This chapter illustrates the results related to the study questions and hypotheses. 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, 9) 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. This finding is supported by the findings of Dash and Roy (2020, 18) 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, 138) 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.

Table 7: Simple linear regression hypothesized relationship between human capital, innovation capability, and employee job performance.

Hypo	Variables	Estimate (β)	Standard Error	t-Value	p-Value	Decision
H1	HC → IC	0.694	0.061	18.930	0.000	Supported
H2	HC → EJP	0.689	0.051	18.656	0.000	Supported
H3	IC → EJP	0.620	0.033	15.505	0.000	Supported

n = 387; [a]<0.01, [b]<0.05.

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, 367) 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, Agarwal, and Ikeda (2017, 268) 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, 163) 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, Raju, and Matingwina (2018, 7) 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, 31) and Saliu et al. (2018, 20) who found that library personnel at Nigerian Universities have high levels of job performance. The findings contradict that of Okeke and Mytunda (2017, 61) 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 innovation capability was established in the first 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 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 (Cabello-Medina, Lopez-Cabreles, and Valle-Cabrera 2011, 810). The findings concur with the findings of Dakhli and De Clercq (2004, 123) who found out that human capital has a significant and positive effect on innovation capabılıty. 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.

This is supported by the findings of Omerzel and Jordana (2016, 1086) 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, 226), 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, Chappin, and Vermeulen (2020, 1153) who discovered that 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 relationship between human capital and employee job performance was investigated in the second hypothesis. The findings showed that human capital significantly and positively affects employee performance. H1 is supported which is similar to Becker's (1962, 12–15) human capital theory and the resource-based view (Barney and Wright 1998, 33) which stated that human capital, which consists of employees' capabilities and personal attributes,

allows them to be more effective in their work. This is consistent with the report of Katuli-Munyoro and Mutula (2016, 138) who found that human capital is the most valuable resource which is integral in improving the performance of LIS lecturers' and leads to the effective and efficient delivery of LIS curricula. This is in line with the report of Asonitis and Kostagiolas (2010, 155), who opined that human capital plays a significant role in enabling library professionals to complete their duties successfully, deliver quality services, attain their goals and ultimately improve their work performance.

This is corroborated by the report of White (2007, 114) 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 2017, 14) who discovered that librarians' work performance is not connected to their human capital. This negative association was caused by a lack of progress on librarians' performance particularly, among those who had training associated with the library. Furthermore, the findings of the current study contradict the findings of Kasoga (2020, 18) 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.

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, Najmi, and Ikram 2020; Gurlek and Cemberci 2020). This is similar to the findings of Sadikoglu and Zehir (2010, 23) who found that that innovation through the creation of employees' ideas for new products and services enhance the production of quality products and services and also increase customer satisfaction in an organization and therefore enhance the overall work performance of the employees.

This is supported by the report of Obeng and Mkzhize (2017, 18) 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 to swiftly respond to the expectations and demands of customers. This is consistent with the report of Walker, Damanpour, and Devece (2011, 371) who established that innovation enables employees to effectively and efficiently manage their work and to achieve better performance. This disagrees with the report of Hussen and Cokgezen (2021, 4) 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.

7 Conclusion

The main aim of the study was to investigate the effect of human capital on innovation capability 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 major analysis of the data was conducted using Spss v.23, and 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. Overall, the present study shows that human capital is a critical component in nurturing innovation capabilities and employee performance in academic universities in Namibia, South Africa, and Zimbabwe. These findings were mainly consistent with previous literature on the relationship between human capital, innovation capability, and workers' performance in organizations.

8 Limitations and Recommendations

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. Furthermore, 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.

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, 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 researchers could also examine the dimensional relationship between human capital, innovation capability, and employee job performance to obtain a thorough understanding of their association.

9 Research Implications

The present study has many practical and theoretical implications. From a practical perspective, 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 and 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 and Oke 2016, 988). 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 2007; Osadebe et al. 2018).

Furthermore, the results of this study provide sufficient empirical evidence that shows that employees' job performances in academic libraries are affected by their innovation capabilities. Hence, if library managers and policymakers would like to vastly improve employees' performance, they must devote greater attention to innovation capability as it is a critical component for enhancing employee performance. Library managers and policymakers must concentrate on strategies that substantially raise the degree to which the innovation components are attained to acquire greater benefits from the implementation of innovation (Kafetzopoulos and Psomas 2015, 122). 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, Masa'deh, and Abualoush 2020, 217).

From the theoretical perspective, this study covers the gap in the existing literature by assessing the relationship between human capital, innovation capability, and employee job performance particularly, in academic libraries located in Southern Africa. This study 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 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, 108). The present research also supports the innovation capability advocate stance that effective investment in innovation capabilities within an organization not only has a positive impact on employee and organizational performance but also leads to improved competitive advantage.

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