# LIBRARY USAGE BY UNIVERSITY ACCOUNTING STUDENTS: A COMPARISON OF CONTACT AND OPEN DISTANCE LEARNING INSTITUTION IN SOUTH AFRICA

by

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# **DEDICATION**

This dissertation is dedicated to Almighty God who gave me the grace and strength to undertake this study.

## **DECLARATION**

I declare that that *LIBRARY USAGE BY UNIVERSITY ACCOUNTING STUDENTS: A*COMPARISON OF CONVENTIONAL AND OPEN DISTANCE LEARNING

INSTITUTIONS IN SOUTH AFRICA is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references. I further declare that I have not previously submitted this work, or part of it, for examination at UNISA for another qualification or at any other higher education institution.

SA Fakoya-Michael (Mrs)

**JUNE 2018** 

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#### **ABSTRACT**

This study examines the current level of library patronage among accounting students both in the distance and a contact learning institution in South Africa. There is a relative absence of studies of academic library usage by accounting students. The low level of library usage, that is, low level of library visits and poor research skills of undergraduate accounting students has been attributed to the difficulty in integrating accounting curriculum with information literacy. However, the challenge facing academic librarians is persuading both academic faculty and accounting students to integrate information literacy into their curriculum and to convince individual students to make time in their schedules for library usage. In South Africa, this problem is compounded when it is a requirement of the accreditation body, The South African Institute of Chartered Accountants (SAICA), which requires academic departments to integrate library usage into the accounting curriculum for their programme to be accredited.

The study examines the current level of library patronage among accounting students both in a distance and a contact learning institution in South Africa. The sub-objectives of the study were to investigate the reasons for low level of library patronage among accounting students in South African Universities; to determine what features would make the use of a library for locating information that is relevant and attractive to university accounting students in a contact and a distance learning institution in South Africa; and to investigate what, if any, improvements to library service can be made to make the use of the library of significant importance.

Using a survey research method that utilises a structured questionnaire, this study gathered data from a sample of 500 accounting students from a distance and a contact learning institution in South Africa, out of which 379 returned completed questionnaire, representing 76%. The

finding indicates that as with most accounting students across the world, South African students are no exception because of the peculiarity and design of their programme curriculum that provides recommended texts for students' usage. The findings further show that the apathy of library services patronage among university accounting students in South Africa is exacerbated by lecturers who seldom give assignments or tasks that require the students to search for information beyond the recommended textbooks. Findings indicate that the most significant factor that influences accounting students of universities to patronise library resources are the expertise and interaction of the library staff. This is supported by the Expectation-Confirmation Theory framework which posits that patrons will continue to use library services only if their perceived perception of the usefulness of the services are satisfied. In this case, accounting students from both institutions examined in this study confirm the Expectation-Confirmation Theory framework of satisfaction being based on the perception of the library services they receive. The study recommends that in motivating accounting students to patronise library services, library management needs to understand the discipline-specific teaching and learning practices and collaborate with curriculum developers in the accounting discipline to incorporate the use of library services in their programme. Further study is encouraged to include all universities that offer accounting programmes in South Africa for a more robust finding.

*Keywords:* library patronage, University accounting students, information needs.

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# LIST OF ABBREVIATIONS

UNISA- University of South Africa

#### **CHAPTER ONE: GENERAL INTRODUCTION**

#### 1.1. Introduction

Some writers have claimed that a library is an essential part of a university system with the sole purpose of simplifying and satisfying the information need of its academics (Sheikh, 2014). Iwhiwhu and Okorodudu (2012) state that libraries are meaningful to improving knowledge management because of the value of information, quality of information system and library services provided. Academic libraries are designed to serve the teaching and research needs of both scholars and students (Serenko, Bontis & Moshonsky 2012). Library services support the attainment of the university curriculum and the research activities of academics and students (Lowry, 2012). Adeniran (2011:209) states that academic libraries should strive to support and grow their user base by focusing on meeting their users' expectations. In this vein, Bartlett and Toms (2005) explain that information is used to create knowledge not in the sense of data and facts but in the form of demonstrations that provide meaning and setting for the purposive action.

The increasing use of technology as a means of accessing information and the recent shift towards cooperative learning and group study have changed the way students use academic libraries and library resources (MacWhinnie 2003:241). The continual changes in information technology over the last three decades have brought substantial changes in library services and information seeking behaviour among the public and academic libraries (Salisbury & Griffis, 2014). In helping library users get the best of information service, library resources such as websites should be sufficiently updated on a regular basis particularly when users study through distance learning (Khan, Zahid & Rafiq 2014). The ability to access, evaluate and use

information is a prerequisite for life-long learning and a basic requirement for the information society since university students are expected to conduct independent exploration effectively in diverse disciplines and topics depending on their area of study (Kavulya 2003: 216). As such, university students should not only master the skill of finding information in print format or electronic formats but also be able to evaluate and use it competently both in their learning activities as well as in their later lives (Kavulya 2003). As such, academic libraries need to work towards demonstrating value and excellence to students while providing students with superior facilities and support with less cost to the university (Cooke, Norris, Busby, Page, Franklin, Gadd & Young 2011).

Notwithstanding, in exploring the attitudes and expectations of patrons to e-books in South African universities' libraries, Kahn and Underwood (2015) explain that even though patrons were eager to use e-books, they are unaware of the extent of its availability, hence, are contended to use it as a convenient alternative to print books. This study investigated the attitudes of accounting students towards the usage of the academic library by making a comparative study between conventional (a contact learning institution) and open distance learning universities. This study used a survey-based approach to investigate library usage and research expectations by University accounting students based on their perception of accessibility of the academic library resources of universities in their quest to overcome their academic challenges in a traditional (a contact learning institution) and open distance learning universities. The evidence-based approach promotes the collection, interpretation, and integration of valid-based relevant user-reported, librarian-observed and research-derived evidence to advance the quality of expert judgement (Lowry, 2012). The findings compare two types of universities, the traditional and distance learning institutions selected for this study, to

determine if there is an expectation gap with regards to the library usage by their accounting students. This comparison reveals the challenges, implications and prospects of accessing library resources by accounting students in the two selected universities.

#### 1.2. Research problem

Accountancy programmes in South African universities are accredited by the South African Institute of Chartered Accountants (SAICA) through a guidance document known as Competency Framework (CF). The theory and the practice which underpins the CF are the ideas of John Dewey, an American philosopher of education. Dewey believed that knowledge is developing and growing through "experiment" or discovery. The SAICA Competency Framework provides a set of clear standards within the accountancy profession which include specific and pervasive competencies (South African Institute of Chartered Accountants [SAICA], 2011). The CF identifies the competencies which a Chartered Accountant (CA) should demonstrate at the entry level of the profession to encompass core competencies such as accounting and external reporting; taxation; management decision-making and control; strategy, risk management and governance; auditing and assurance; and financial management. Pervasive skills that are critical at the entry level of the profession include ethics and professionalism; professional attributes; and personal attributes (South African Institute of Chartered Accountants [SAICA], 2011). Since the objective of the CF hinges on Dewey's approach, SAICA logically requires students to consider the wider significance and implications of new knowledge about current accounting contexts in order to prepare them for leadership positions thus aligning to the pervasive skills mentioned earlier. An important attribute of the pervasive skills requirement is the personal attributes of being able to selfmanage, demonstrate leadership and initiative, and be a life-long learner. To self-manage entails that the new entrant CA should be able to analyse information about the entity's performance on a regular basis. One attribute of being able to demonstrate leadership and initiative is the ability to communicate with internal and external clients to achieve milestones and objectives. As a life-long learner, the new entrant CA should demonstrate intellectual ability to apply him/herself at a level that enables life-long learning in the demanding context in which the CA works (South African Institute of Chartered Accountants [SAICA], 2011). However, the challenge facing academic librarians is persuading both academic faculty and accounting students to integrate information literacy into their curriculum and to convince individual students to make time in their schedules for library usage. In South Africa, this problem is compounded when it is a requirement of the accreditation body, SAICA, which requires academic departments to integrate library usage into the accounting curriculum for their programme to be accredited. The low level of library users and poor research skills of undergraduate accounting students has been attributed, in a North American environment, to the difficulty in integrating accounting curriculum to information literacy (Gross, 2005; Lowry, 2012). However, this assertion may, or may not, be the case elsewhere. Hence, this study seeks to investigate the circumstances in South Africa through a comparative study of the two types of universities mentioned above.

## 1.3. Research objective

The purpose of this study was to determine the current level of library patronage among accounting students both in a distance and a contact learning institution in South Africa. The sub-objectives for this study include:

- To investigate the reasons for low level of library patronage among accounting students in South African Universities.
- To determine what features would make the use of a library for locating information that is relevant and attractive to university accounting students in a contact and a distance learning institution in South Africa.
- To investigate what, if any, improvements to library service can be made to make the
  use of the library of significant importance.

In achieving this objective, the study seeks to investigate the research questions below.

#### 1.4. Research questions

The study posed the following research questions to determine those key variables that attract or discourage accounting students at universities from patronising library services.

- What is the current level of patronage among university accounting students in a contact and a distance learning institution in South Africa?
- What are the reasons for low level of library patronage among accounting students in South African Universities?
- What features would be required to make the use of a library for locating information relevant and attractive to university accounting students in a contact and a distance learning institution in South Africa?
- What improvements are required to make the use of the library of significant importance to university accounting students patronise library services in a contact and a distance learning institution in South Africa?

These questions are designed to resolve the research problem identified for this study.

## 1.5. Justification of the study

The accounting programmes of most universities in South Africa, especially open distance learning based and contact learning institutions, admit students from a diverse background with different influencing reasons into accounting programmes (Teferra & Altbachl, 2004). Different reasons influence a student to choose to study accounting, and these pose different challenges to the student because of their diverse backgrounds. However, this set of students encounter different types of challenges in seeking information because of the peculiarity and demand of their chosen discipline (Simon, 2009). These challenges are made more complex for this set of students, especially if they have not been exposed to using library services. Therefore, it has become necessary to encourage this set of students to embrace library patronage to help them imbibe life-long learning.

Despite the social and economic importance of accounting education and the positive influence it has on the economy and society, researchers have observed the low level of library usage among accounting students (Gross, 2005; Lowry, 2012). It is therefore important to investigate reasons for the low level of library patronage among accounting students in South African universities. Given the importance and increasing information need of accounting students in the face of changing economic conditions the world over, SAICA requires academic institutions to integrate library usage into their accounting curricula and programmes. In fulfilling these expectations, the library management in these universities plays a vital role to improve the quality of library resource planning, control and decision-making for the survival

and advancement of students studying accountancy at universities to fulfil their academic and professional dreams.

Visits to the library by accounting students at universities have become less frequent as observed by Lowry (2012). Hence, the study investigated patronage of the library by accounting students in a contact learning institution and open distance learning university.

## 1.6. Research methodology

This study used a survey to enable the attitudes of a sample of the population of accounting students at two universities to be gathered and studied. The justification for this design stems from the economy of the design and ability for a quick turnaround in data collection. The quantitative research method was adopted. Participants were 250 university accounting students from the University of South Africa (UNISA), a distance learning institution, and 250 from the University of Limpopo (UL), a contact learning institution. The reason for selecting these sets of students was to benefit from their experience of a full period of study and assumed experience of academic library use. Moreover, the students included both male and female accounting students from both institutions who are in their second and third years of undergraduate degree and postgraduate students that included those studying for Honours, Masters and Doctoral degrees. Students who are in the higher level of study might have reasons to have visited the library during their years of study at the institution and will be more disposed to respond objectively to questions posed. The study used the stratified sampling method. This method allowed the entire population to be categorised into different subgroups or strata which enabled the final subjects to be randomly selected from the chosen strata. Moreover, the participants within the selected strata are based on shared attributes or characteristics. The data collection instrument was a structured questionnaire based on the justification that using the open-ended type of questionnaire might finding in uncontrolled responses that failed to resolve the research questions. Data was collected simultaneously from respondents of both institutions using closed-ended structured questionnaires. The data from this survey study entailed self-administered questionnaire for the two types of institutions selected for the study. A structured questionnaire was administered during lecture or tutorial sessions after being granted permission for this by university authorities. At the contact university, the questionnaire was administered during the lecture periods with permission from the lecturer. At the distance learning institution, questionnaires were administered during weekends at its tutorial venues both at Sunnyside, Pretoria and Polokwane. In this study, collected data was analysed using the Stata 12 statistical software using the Kendall's Tau-b coefficient analysis technique.

# 1.7. Significance of the study

The study was intended to determine how to encourage accounting students studying at South African universities to make more purposive use of the institutional academic libraries to satisfy their information needs. Moreover, the study encourages the development of a more comprehensive curriculum to incorporate library usage into accountancy studies.

#### 1.8. Outline of the dissertation

Chapter One: This chapter provides a general introduction to the study. It discusses the research problem, the research questions and objectives, justification of the study, the research methodology, significance of the study, key definitions and a summary of the chapter.

Chapter Two: The review of literature is undertaken in this chapter. The theoretical framework and other relevant literature are discussed here.

Chapter Three: This chapter describes the research methodology adopted in this study. It provides justification of these approaches, the research paradigm, method, population, sample, data collection, data instrument and data analysis approach as well as reliability and validity, ethical consideration and limitation of the study.

Chapter Four: The chapter presents the finding of the study, analysis and interpretation and discussions.

Chapter Five: Summary, major findings, contribution and study recommendations are discussed in this chapter.

# 1.9. Summary of chapter

The chapter introduced the study and provided justification for its significance. The research problem was identified with appropriate research questions and objectives itemised. The chapter described the research methodology briefly explaining the rationale for the use of a survey research design and method. The chapter discussed the significance of the study and chapter outlines for the rest of the dissertation. The next chapter presents a review of literature relevant to the identified research problem.

#### **CHAPTER TWO: LITERATURE REVIEW**

#### 2.1. Introduction

The previous chapter introduced the need to engage in the current study and provided justification and rationale for it. This chapter reviews related literature on the patronage of academic libraries by users. The literature search was conducted using terms that include "library patronage", "library features", "users' satisfaction", "role of academic library", "influence of technology in library usage", "library planning", and "influence of social networking tools on library services". The search was limited to English language (non-English language sources are excluded) peer-reviewed material over a period of seven years (except where older sources are relevant to current study) in Library Information Science databases such as Library and Information Science Abstracts (LISA), Library, Information Science and Technology Abstracts (LISTA), Library and Information Science Source (LIB-LIS), Eprints in Library and Information Science (E-LIS) and Google Scholar.

This chapter is subdivided into Section 2.2 that discusses the theoretical framework on which the study is based. Section 2.3 discusses the level of library patronage among university students, and Section 2.4 presents features of a library system and library patronage. Section 2.5 discusses improving satisfaction among library patrons, the role of the library in student academic performance is examined in Section 2.6, while Section 2.7 discusses library services and patrons' satisfaction. Section 2.8 reviews the influence of technology on library patronage and Section 2.9 considers how to motivate patrons through technology. Section 2.10 discusses the effect of Web 2.0 and Section 2.11 presents the influence of social networking tools on patronage, with Sections 2.12 and 2.13 discussing the use of Facebook and Twitter to attract

patrons to use library services. The last section discusses the essentials of library planning and its influence on patronage.

#### 2.2. Theoretical framework

This study focuses on concepts such as library usage, users' patronage among a defined set of university students that are either in a contact or distance learning institution. The theory base for Library and Information Science (LIS) is weak (Poole, 1985; Schrader, 1986), it appears that much of what is known has not been formally explicated and presented as theory (Buckland, 2014). The paucity of use of theory in information studies research has made it difficult to attempt a list of relevant theories suitable to be used as a theoretical framework. Borrowing from the Expectation-Confirmation Theory (ECT), this study explains that patrons' satisfaction is linked to continuance intention since satisfaction is a prerequisite to establishing patron loyalty and continuance usage intention (Shankar, Smith & Rangaswamy, 2003; Hossain & Quaddus, 2012). The ECT postulates that before any interaction between parties, there is an expectation. It posits that if such an expectation is met positively, then the expecting party is satisfied (Jiang & Klein, 2009). However, if that expectation is met negatively, the party is dissatisfied. Based on this simplicity, the ECT is considered a useful explanatory tool. For example, for a patron makes use of library services, if service received meets or exceeds his/her expectations, the library patron is satisfied. Moreover, if a library patron's expectations are exceeded positively by the services received, the patron is satisfied with the service. However, if the library service fails to meet the patron's expectations, then the patron is dissatisfied. The ECT speculates that patrons' satisfaction is determined by the interaction of previous expectations and perception of delivery (Jiang & Klein, 2009). ECT can be used to examine reasons for patrons' satisfaction or dissatisfaction with library services. Additionally,

ECT argues that patrons' decision to frequently use a service (in this study, library services) is majorly determined by the satisfaction of prior services received (Halilovic & Cicic, 2013). Consequently, this study seeks to determine what motivates accounting students to patronise the physical library and library resources. The study uses the ECT, which is widely used to examine consumer (in this case, library patrons) satisfaction and post-purchase (post-usage) intention (Hossain & Quaddus, 2012). Hence, ECT is suitable for this study because of its focus to determine what constitutes satisfaction and dissatisfaction in the level of library services and patronage among accounting students both in a distance and a contact learning institution in South Africa.

#### 2.2.1. Expectation-confirmation theory in information systems

The cognitive beliefs and effects that influence a patron's intention to continue using information systems (IS) are determined by patrons' satisfaction and perceived usefulness of its continued use (Bhattacherjee, 2001; Joo & Choi, 2016). The ECT framework posits that patrons' satisfaction is determined by interplay between prior expectations and perception of its delivery (Jiang & Klein, 2009). Brown, Venkatesh and Goyal (2014) argue that the ECT framework has produced conflicting findings. Although the ECT framework is popular in the context of marketing research, it has nonetheless been modified by information systems researchers (Hossain & Quaddus, 2012). Limited studies have adopted the ECT framework to understand users' continuance intention of using information systems. For instance, Cheng (2014) adopted the ECT framework to understand users' continuance intention of using a national-level digital library system and found that the framework is suitable in library system research. Also, Lin and Wang (2012) adopted the ECT framework to understand the continuance intention of e-learning systems. Joo and Choi (2016) identified a variety of factors

that could motivate patrons to use information sources, including accessibility, effectiveness, convenience, quality of resources, quality of service and usability. However, there have been few studies that used the ECT framework to determine what motivates accounting students of universities to patronise library resources in a contact and open distance learning institutions. This study argues that in providing services to clients, it is crucial that service providers understand the antecedents and the effects on satisfaction, especially in library services.

#### 2.3. Level of library patronage among university students

Academic libraries are significant to higher education institutions to provide support to its curriculum and faculty and student research (SJSU iSchool, 2018). They are necessary because of the emerging knowledge management field to help improve effectiveness (Townley, 2001). However, Gayton (2008) observed the apparent death of academic libraries findinging from the decline in the circulation of print materials, reduction in the use of reference services, and decrease in front desk counts. In addition, Academic libraries are under pressure that is forcing them to develop new resources and service areas to respond and adapt to remain relevant in the face of rapid developments in technology that require changes in scholarly communication, data management, and higher education pedagogy are affecting user expectations (Saunders, 2015). Moreover, Moreover, Saunders (2016) maintains that academic libraries are pressured to demonstrate their value through assessment being a department within higher education institution to support the university's mission and goals as well as strategic plans. Hence, academic libraries need to live up to its expectation in rendering the required support to its patrons within the university community.

Patronage is an essential consideration for library management because it is a critical reflection of the delivery efficiency and the effectiveness of the total service. Feedback on library services must be obtained from time to time from users to improve service delivery (Ogunmodede & Emeahara 2010). Goodall and Pattern (2011) observe that some university students find it difficult to locate library materials. They note that some students find it difficult to access materials without the help of library staff. While librarians consider the catalogue as an essential library tool to access library collections, if library users are less convinced, then it can become the least used (Catalano, 2013). Also, Sugimoto, Li, Russell, Finlay and Ding (2011) claim that most university students prefer to access materials using subject location on the shelf. In contrast, Anderson and May (2010) argue that even though the subject discipline method enables students easy access to more relevant materials, the limitation is their inability to access works of interest relating to their subject areas that appear within the literature of other disciplines.

Reasons for making use of library facilities by students have mostly been linked to preparation for a test, reading of newspapers and use of online facilities for social media purposes (Jeong 2012). However, Aabø and Audunson (2012) observe that students' patronage of academic libraries is at a low ebb. As such, Del Bosque, Leif and Skarl (2012) suggest that academic libraries need to encourage and promote the use of academic knowledge through communication with the different patrons by highlighting the acquisition of new sources and providing current awareness with customised catalogue accesses. Although library patronage is essential to the continued development of library services, being considerate of current patron preferences is equally significant to achieve optimal service. In this regard, Nse and Okorafor (2011) argue that in accommodating specific target groups, libraries need to develop

expertise in collection development through the usage of paper and electronic resources and the media by which electronic resources get to users. However, Ogunmodede and Emeahara (2010) caution that care should be taken not to ignore assessing users' satisfaction because this can pose a threat to a library's survival. Moreover, patrons like any other clientele need to be motivated to patronise library services. Makinde and Makinde (2013) compare how a patron's interest in reading books correlates with a patron's use of library sources in the same way that motivational factors play a vital role in determining the level of library patronage among students.

University libraries have an important role to play to increase library patronage among accounting students by providing required materials both in print and non-print media to meet the needs of the patron. The degree of library patronage varies between institutions and between the disciplinary interests of students. For instance, students in the visual science subjects may not patronise the library as much as those in humanities (Goodall & Pattern 2011). Dadzie (2005) opines that the value of a library will be enhanced if librarians can determine patronage level and information types accessed by patrons. Dadzie (2005) also includes librarians' ability to assess the different communication tools employed and types of challenges encountered by patrons when accessing the electronic resource and devising different ways to improve levels of patronage. The standard of patronage is a major factor in deciding on a strategic approach to the management of a library. As such, Choy (2011) explains that with a below average level of patronage, a library will be unable to fulfil its role as a leading cultural, social, and learning institution in society. This means that libraries should constantly engage with their users to ensure that library resources, services and facilities continue to be valued and used (Choy, 2011). To this extent, Angell (2013) suggests that both librarians and patrons need to

continually share the responsibility of assessing and providing feedback about academic library services and collections to ensure sustained improvement. Nevertheless, Kwanya, Stilwell and Underwood (2014) argue that the emerging generation of research and academic library users expect the delivery of user-centred information services through apomediation to the support the role librarians can provide users by bridging the gap when users need help. They maintain that Library 3.0 has the potential to create intelligent libraries that is capable of meeting contemporary information needs of users and enhance the role of librarians as apomediators. However, Dadzie (2007) identifies some constraints that could incumber the smooth implementation of a campus-wide information literacy project in universities to include large student enrolment and lack of collaboration or cooperation among academic departments rolling out these information literacy initiatives. It is, therefore, good practice for librarians to study patrons' preferences on a regular annual basis. Although it is essential for academic libraries to improve provisions of library services, patrons also have a responsibility to suggest areas of improvements to librarians.

#### 2.4. Features of a library system and library patronage

This section discusses the progress of library management software, characteristics and trends of software such as packages that provide a web interface to make library services attractive to patrons. There is a comparison between the different electronic systems. Due to the nature of academically related services furnished by the library, some essential features are required to make it attractive to patrons such as the location, architectural design, and electronic sources and shelving arrangements. Tenopir (2011) argues that due to the decrease in resource allocations to academic libraries, they face the challenge of convincing patrons to see the value of using library services. Moreover, Way (2010) argues that the rise of the internet over the last

two decades has either been a blessing or a curse. This is because the internet has provided more resources to users without them necessarily having to visit the library and limited the number of patrons to the library which can, potentially, subscribe to many databases and make them available to users.

While patronising academic libraries may contribute positively to students' academic performance, one cannot be sure that library usage by university students will finding in improved academic performance (Haddow, 2013). As such, the study of usage patterns will assist in revealing such aspects as the frequency of visits and preferences of patrons for the range of services and sources available (Aabø & Audunson, 2012). By this means, it is necessary to determine those features or characteristics that motivate students to patronise the library more frequently. According to Kavulya (2003), students who live off campus are more likely to use library materials and information sources than their counterparts who live on campus. This implies that a student's proximity to the physical library is a significant factor of patronage.

Another essential feature of the library is the availability of electronic sources. Haddow and Joseph (2010) criticise the assertion that a focus of inquiry played a major role in patrons' decision to use electronic library resources rather than just exploring the internet. They found that students who have a longer experience of the use of library materials are more likely to be aware of the range of databases. It is critical therefore to understand the reasons why some patrons make use of electronic sources (Tenopir 2011). In this regard, Adeniran (2011) identifies a challenge when using library resources, particularly electronic resources, because their use is not necessarily straightforward. In contrast, Folb, Wessel and Czechowski (2011) contend that when using a search engine over the internet, where the use of a single keyword

usually findings in thousands of hits, users of the library's electronic source will need to identify and select a database and make use of search words. Also, Sun, Chen, Tseng and Tsai (2011) suggest that the librarian must be trained to assume the role of educating patrons on how to access library databases to enable easy access to information sources. It is essential for this study to know whether accounting students at universities have been trained on the use of databases to search for their information needs.

One significant feature of modern library service is the use of mobile access technologies. In this regard, Wang, Ke and Lu (2012) reflect that mobile access technologies have been embraced by both the corporate entities and higher education. Moreover, it appears that more academic libraries are recognising patrons' demand for inclusion of mobile technologies to access library sources. Chu and Du (2013) recognise the potential of accessing library sources through social networks through mediums such as Facebook and Myspace. Also, Ayu and Abrizah (2011) indicate that in becoming more relevant in a culture where the use of social media has become much wider, academic libraries now have interactive Facebook pages to encourage patronage. Also, Sun *et al* (2011) observe that the availability of mobile access technologies enables patrons to access library services in a unique way that does not require them to be physically present in a library building. In the same vein, Aharony (2012a) explains that patrons do not need to be physically present in a library building since they can ask reference questions, search databases, place inter-library loan requests, and obtain academic articles using electronic means.

Notwithstanding that in most academic libraries, patrons can access quality material more easily than they would previously have, there remain challenges relating to user preferences (Aharony, 2012a). It appears that the availability of diverse electronic sources such as

electronic sharing tools have altered the way patrons express demand for library services. As such, librarians find it difficult to cope with changing technology and patrons' preferences. However, Sun *et al.* (2011) question how today's librarians will be able to cope with the increasing diversity of resources, such as different modes of online bibliographic instruction and different interfaces for public access to online catalogues. Again, Aharony (2012a) suggests that the range of services provided by modern library services should satisfy the diverse needs of users.

Although expectations of social networks are that their use may change the way patrons access the library, the manner of promoting library services can encourage library patronage. Dickson and Holley (2010) reiterate that academic library outreach is not uncommon but that such outreach approach should further encourage increased patronage. Some outreach methods focused on encouraging library patronage among students and faculty so that these patrons do not source their information needs elsewhere (Dickson & Holley, 2010). Despite that e-resources have facilitated the availability of increased resources to the library at reasonable costs and time, the expectations of patrons have increased as well (Madhusudhan, 2010). In contrast, Kim (2011) questions the significance of the huge investment into designing a library website if patrons do not value such investment as indicated by low usage.

#### 2.5. Improving satisfaction among library patrons

Iyoro, Isiaka and Adesola (2012) indicate that obtaining feedback from library patrons is critical to improving library services. This means that library patrons should constantly provide feedback to librarians to improve their services. However, even though a library may be well-equipped, it will amount to a waste of resources if it is not well visited or patronised. Umeozor

(2013) emphasises the need for librarians to create continued awareness about the type of services available in their libraries to enable users to make a free choice of the kind of services and resource they prefer to use. Moreover, Knight (2013) identifies that libraries need to determine usage statistics through surveys among patrons to help when making acquisition decisions rather than impulse buying, which assumes knowledge of patrons' preferences. Nesba (2014) argues that librarians understanding of patrons' preferences is a critical approach to meet patrons' expectation from different perspectives and knowledge structures. As such, Opoku (2013) suggests that for academic libraries to meet the expectations and preferences of patrons to get connected and patronise library services, librarians need to undertake quality improvement. There are important factors that need consideration when trying to improve library patronage. Some of these factors may include user education and user satisfaction.

The low degree of satisfaction among library patrons relates to poor library service in terms user satisfaction feedback such as the lack of expertise "at the information counter, the lack of efficient reference services, the need for recent periodicals and journals, the lack of photocopy services, the need for a well-organized circulation service, and the lack of functional schedules" as major problems (Niyonsenga & Bizimana,1996; Oukrich & Bouikhalene, 2017). Germano (2010) suggests that libraries need to improve on their marketing drive to motivate patronage. Also, Khaola and Mabilikoane (2015) conclude that despite the differences in perceptions of library service quality and expressed satisfaction among library patrons, it is critical to understand patrons' expectations and preferences to improve service quality. Moreover, Ogunmodede and Emeahara (2010) contend that because patrons' expectations and preferences are critical to library services, librarians should consider patrons' feedback on assessment of the quality of services and resources. Such consideration will help improve library services.

Hence, Aderibigbe and Ajiboye (2013) propose that to meet the expectations and preferences of users effectively, librarians need first to determine specific needs of their patrons, and second, determine patrons' knowledge about how to search and use library resources.

Technological expectations and preferences are critical in attracting patrons to access library sources in modern times. Verma and Parang (2015) explain that because of the changing expectations of users regarding information seeking, analysing patrons' satisfaction is a crucial essential to evaluate the type of collection and services a library should provide. Moreover, Hussain and Abalkhail (2013) assert that an assessment of the quality of a library's service through patrons' feedback will help librarians to identify areas of improvement. In this regard, Chandra Mohan Kumar and Dominic (2012) reflect on the complexity of the pressure by patrons on librarians for better and higher-quality library services which have made librarians to devise better and more efficient means to attract patrons. Although patrons' satisfaction depends on the availability of different library sources, the quality of service and professionalism of librarians will be an added advantage. Despite the conclusion that patrons will tend to embrace the latest technology (Choy, 2011), librarians need to understand their patrons' interactions with such technologies and the capacity and capability of library infrastructure to provide technical support when the need arises. As such, Mirza and Mahmood (2012) propose the introduction of both online and offline feedback systems to deal with the challenges of technical issues findinging from the use by patrons. Therefore, it is better to observe whether accounting students at universities are exposed to both online and offline feedback systems to deal with challenges arising from their interactions with library technologies.

Despite the challenges patrons might encounter when using library technologies, Hussain and Abalkhail (2013) question the ability of libraries to provide quality services without periodic assessment of patrons' satisfaction. Likewise, Singh (2013) reflects about patrons' awareness of the proper utilisation of library resources in the absence of librarians' better understanding of user behaviours and needs. As such, a better understanding of patrons' needs will trigger a better user-oriented library design that should adapt to patrons' preferences and expectations. On the other hand, Choy (2011) reflects that the different options available to new patrons afford them an atmosphere within which to make decisions based on the quality of library services provided as well as expediency or other factors. However, Kuo and Zhang (2013) express the need for libraries to conduct studies on users' satisfaction to assess their perception on how to improve library services. For libraries to offer functional services that meet patrons' satisfaction (Verma & Parang, 2015), the perception of patrons of the quality of information, systems, service, usefulness, ease of use and cognitive absorption are some of the significant predictors that need to be considered (Masrek & Gaskin, 2015).

The quality of services provided by a library may be used to measure its patrons' satisfaction (Kiran, 2010). Cassidy, Britsch, Griffin, Manolovitz, Shen and Turney (2011) indicate that the main challenge for most librarians is deciding on the appropriate mode of communication to use when explaining about library services. Cassidy *et al* (2011) suggest that rather than adapt modern technologies touted in the media, librarians need to adapt their services to the specific expectations and preferences of their patrons. Maull, Saldivar and Sumner (2012) explain that for a library to grow, it is necessary to adapt efficient and scalable methods to improve patronage. In this regard, Kiscaden (2014) evaluates the current information environment with its many available information sources and recognises that it may be difficult to keep abreast

of current information sources relating to a specific discipline. To satisfy patrons' information requirements, librarians might need to determine patrons' ability to access, organise, use, and search for information (Aderibigbe & Emmanuel, 2012). These will help librarians towards designing an effective user education system. In this regard, Al-Maskari and Sanderson (2010) conclude that measuring patrons' level of satisfaction with library service using different criteria may be subjective. As such, to have a successful library education programme that satisfies users' needs, librarians need to understand patrons' preferences and expectations fully.

# 2.6. The role of a library in student academic performance

While it is important to determine the criteria that can improve patrons' expectation and preferences, it is pertinent to examine the role of libraries in students' academic performance. Having access to library material sources plays a major role in student performance although these materials come in different formats (Ortlieb, 2014). Students require relevant skills to be able to access accurate information needed to do well in their various courses (Katz, 2013). Moreover, libraries need to be able to meet all the preferences of their patrons in whatever format they desire for them to excel (Chan & Wong, 2013; Hyman, Moser & Segala, 2014). On the back of current trends in information technology and accessibility, the use of social platforms is a welcome development (Chu & Du, 2013). A library should meet the different information needs of its various patrons to retain patronage. As such, information need is a process where one perceives that there is a gap between the information and knowledge available to meet specific needs of a patron (Case, 2008). Furthermore, Case (2008) reflects that there may be an additional gap whereby the individual does not know where and how to obtain relevant and accurate information to satisfy his/her informational needs. Since patrons'

need for information is evolving, librarians ought to be aware of this and help to trace library materials to improve learning (Kuhlthau, 1993; Baby & Kumaravel, 2011).

Information-seeking is a trait of human behaviour conducted using different information sources (Wilson, 2000; Spink & Cole, 2006; Halder, Ray & Chakrabarty, 2010). However, different human behaviour patterns are exhibited by patrons when searching for information relating to their needs because each patron seeks for information for various reasons (Catalano 2013). In this regard, Cole (2011) affirms that information seeking is usually for personal reasons and patrons search for information in ways that satisfy their needs. Connaway, Dickey and Radford (2011) argue that individual patrons have the tendency to exhibit certain human traits by adopting different strategies to meet their information needs. Despite attempts by librarians to understand what human factors determine individual patrons' information preferences (Ozoemelem 2009), Johnson and Finlay (2013) question the influence a library environment has on patrons' ability to retain knowledge. Conversely, Haddow and Joseph (2010:238) argue that a patron's frequency of use of a library affects their retention level. On the other hand, Folb et al (2011) justify that since patrons have preferences for resources in different formats, some patrons would prefer a greater breadth of selection rather than purposeful duplication of sources in several formats. Nevertheless, Folb et al (2011) suggest that librarians can improve the awareness level of their different collections among patrons through ongoing publicity.

The rigours of academic study may change the way students' access information from specific sources relevant to their needs (Kamei-Hannan, Holbrook & Ricci 2012). Information is indispensable in decision-making and a key resource for the development of the society. An effective and efficient utilisation of information by university students is a necessity to improve

their academic performance (Alma, Groothoff, Melis-Dankers, Suurmeijer & Van der Mei 2013). Some universities require that their students attend additional classes to learn specialised skills and competencies to improve their ability to search and evaluate findings. Consequently, Ogunmodede and Emeahara (2010) emphasise the significance of a pro-active university library to influence students' academic performance. This has become necessary because university academic libraries are required to demonstrate their value to the institution through "the impact library usage has on the retention and academic success" of its patrons (Soria, Fransen & Nackerud, 2013: 147). Haddow (2013) found that students in the later stages of their studies borrow materials from the library more frequently than new students, but there is no association between patrons' socioeconomic background, library use, and retention. In contrast, Haddow and Joseph (2010) confirm that library usage is linked to retention and that academic libraries can achieve notable success by focusing on the provision of resources that meet patrons' expectation and preferences. In a study by Stone and Ramsden (2013), a significant correlation was found between library patronage and student accomplishment, but they cannot conclusively assert that library usage and student accomplishment have a causal relationship. However, Soria, Fransen and Nackerud (2014) conclude that logging into databases and using library terminals were actions that are consistently and positively associated with students' retention.

Determining what information sources to use with a set of students is very crucial to improving service delivery. The availability of new search services and resources seem to influence the preferences and expectations of user groups. Evidence by Ratna and Mehra (2015) indicate that the internet has a significant influence on self-learning of most university students. In this regard, Junco and Cotten (2012) suggest that to improve self-learning, students' ability to filter

and select relevant subject information among the volume of available information on the internet is critical. In support, Litt (2013) proposes that for patrons to benefit from the abundance of information available through internet sources, librarians need to avail themselves of internet skills to assist patrons with their search. The advent of mobile technologies has created opportunities for the different types of patrons to access library sources from remote places. Moreover, Junco and Cotten (2012) explain that the use of different mobile technologies by patrons to access library resources can create both positive and adverse effects on student self-centred learning activities. Although Oakleaf (2011) identifies the library system as crucial to educational attainment, it is still the responsibility of individual students to define and apply themselves to their core discipline when searching for information through any library source.

# 2.7. Library services and patrons' satisfaction

Despite that personalised services are a necessary motivation for library patronage, linking this to satisfaction is equally important. Accordingly, Goodall and Pattern (2011) explain that patrons' satisfaction is directly related to the quality of service. However, they reflect that achieving excellence and a consistent standard in customer services require objective feedback from patrons to discover the precise patterns of need. For those students who make use of the library and course-related information, fewer rely upon interaction with librarians. Roesnita and Zainab (2005) indicate that most new patrons prefer the use of library electronic sources. In a situation where only, printed text or material is available, patrons are forced to demand materials out of necessity (Shabani, Naderikharaji & Reza Abedi, 2011). Stamatoplos and Mackoy (1998) suggest that patron satisfaction is dependent on their expectation of library service. Such patrons' expectations may include easy to follow library instructions as well as

the willingness of librarians to provide training to patrons with required skills for accessing library sources. In this regard, Dadzie (2005) observes that though internet usage by patrons may be on the increase, accessing scholarly databases seems low. The low patronage of scholarly databases relates to the lack of perceived skill to access these databases.

Erens (1996) observes that library collections are understood by users to be deteriorating thereby making accessibility to important journals increasingly difficult hence, findinging in decreased satisfaction with library services. Meanwhile, Hussain and Abalkhail (2013) indicate that most users of the library used the circulation service with most research scholars consulting with librarians to locate reference books for their research activities. In this regard, Okon and Lawal (2013) opine that even with a variety of available databases in the library, a certain category of patrons, such as university students, only get to access these databases when writing a research paper. Similarly, Kumar (2013) observes that most university students use library internet facilities for their academic needs rather than the variety of databases. As such, Hamade (2013) suggests that to help students acquire the necessary skill to improve their search for information and continued lifelong learning, they need training on the use of databases. On the other hand, Ajagbe, Eluwa, Duncan, Binramliy and Long (2011) emphasise that academic libraries need to satisfy their customer needs since their users are very demanding and dynamic. With the growing recognition of the need for lecturers, researchers and students to be able to locate their information needs through the internet and World Wide Web (www) regardless of location, academic libraries should endeavour to satisfy each unique need of their patrons. Srot, Cagran and Grmek (2013) recognise the purpose of academic library services and library information programmes to include enabling patrons to understand the basis of research. However, Pinto and Fernández-Ramos (2010) believe that to obtain the maximum amount of information with the least effort, and in the shortest possible interval, libraries and the systems that they develop must prepare to organise, and filter, information effectively and efficiently. Moreover, Stone and Collins (2013) argue it will be good to measure the impact and value that individual libraries have on their patrons and the community they serve. As such, librarians are relying on inter- library loan the growing use of electronic services rather than purchasing their own materials to meet the information needs of academics has helped to mitigate potentially detrimental effects for research of existing deteriorating collections (Erens, 1996). Additionally, Wai Fan (2005) suggests that university libraries need to set up electronic resources to easy information gathering for research purposes by subscribing to databases to help researchers improve their research output. Hence, Maull *et al* (2012) conclude that as library efforts continue to mature, there is a growing need for efficient and accessible approaches to describe their interest and acceptance, impacting on teacher and student practices and learning.

In a study by Jaber Hossain and Islam (2012), they indicate that patrons were pleased with the number of hours that the library opens and considered this as a library service that got their acceptance and maximum satisfaction. Also, Kiran (2010) found library services to be satisfactory with a positive impact on teaching, learning and research. A study of service quality at the Dhaka University Library by Zabed Ahmed and Hossain Shoeb (2009) reports that service is lagging because service quality did not meet minimum expectation. However, at Jawaharlal Nehru University, findings by Sahu (2007) indicate that academic library service is not lacking in quality. The study by Jamali and Sayyadi Tooranloo (2009) reveals that the importance placed on the various service quality indicators by patrons are not the same, but they attach great importance to the ability to find information at any time of the day. Adikata

and Anwar (2006) indicate that patrons were not fully satisfied with the type of services they get from their academic library, particularly the lack of a conducive academic environment. The different findings from various studies indicate that there is no one indicator to determine how satisfied a patron can be.

## 2.8. Influence of technology on library patronage

The modern age is the technology age. Technology has greatly influenced library services. Kumar and Mahajan (2015) found that some patrons lack the required skill for searching materials on library databases due to the inability of librarians to orientate patrons. Cassidy *et al* (2011) advise that librarians need to include as part of their services training platforms to provide patrons with the necessary skills to improve their database searching. Gurikar and Mukherjee (2015) explain that the inability of some libraries to provide electronic information resources and the lack of expertise to resolve complications arising from their use may finding in a lack of success in attracting patrons. This may mean that automated systems have yet to be embraced by most libraries. Consequently, Gurikar and Mukherjee (2015) suggest that because most libraries are still operating from a physical building, they need to embrace a wider variety of choice for their patrons and ensure that librarians who service them are well trained.

Abubakar and Adetimirin (2015), when describing the importance of e-resources, maintain that while it is easy to retrieve materials through electronic information resources, librarians still have the responsibility to ensure that patrons get maximum benefit from their use. Maull *et al.* (2012) recognise that the different types of automation available in libraries need to match patrons' information preferences as well as expectations. In contrast, Burhanna, Seeholzer and Salem (2009) argue that the arrangement of the physical library spaces may provide patrons

with enough room for social collaborations needed to encourage improved use of library esources. As such, librarians might need to focus more on understanding patrons' behavioural tendencies about whether space arrangement fosters social interactions among patrons.

While it is important to understand whether patrons' social interactions are a motivation for library patronage, it is equally important to know if the available e-resources in the library offer expected satisfaction. Edmunds, Thorpe and Conole (2012) note that the ease of accessing library e-sources does have a positive impact on patrons' expectations and satisfying their information needs. Cassidy et al. (2011) when reviewing the use of podcasts by academic libraries found a positive correlation between podcasts' usage and effectiveness of library services which translates to meeting patrons' expectation in a modern library. As such, Lack, Ball, Kujenga, Chimuka, Mataranyika and Musemburi (2013) recognise that libraries are pressured to devise innovative technological media that meet patrons' expectations and preferences. While the rise in the availability of e-sources at libraries has provided patrons with library access from any location (Ganguly 2009); the existence of innovative technologies is a response to meet patrons' expectations (Charnigo and Barnett-Ellis 2013). Moreover, Burhanna et al. (2009) recognise that it is the librarians' responsibility to understand and meet future patrons' technological expectations and preferences. In other to fulfil their technological responsibility, Sasireka, Balamurugan, Gnanasekaran and Gopalakrishnan (2011) found that many academic institutions are given online journals and e-journals high priority with majority of the institutions subscribing through consortium. Hence, it is the responsibility of librarians to understand and predict what the future technological expectations of patrons will be and consider how they can be met.

Darch and Underwood (1999) stressed the need to link policy and information technology to promote information literacy through ICT for academic development. Incidentally, Cassidy *et al* (2011) recognise that academic patrons get motivated through technological advancements employed by academic libraries such as mobile access. Ming-der Wu (2012) questions whether those academic patrons who lived off campus are competent or found library user interfaces friendly and fruitful when accessing library sources outside the confine of the physical library. However, Croft and Davis (2010) argue that while it is useful for academic libraries to have acquisitions of e-books, it is equally important to make acquisition decisions based on patrons' feedback. In this regard, Bhatti, Tariq and Salman (2014) assume that many patrons cannot benefit from the availability of e-books because they do not have appropriate skills to access them. Meanwhile, Liu and Briggs (2015) explain that even though it is not feasible to duplicate all content of a library's website in a mobile version, librarians may need to prioritise what patrons find most important on the mobile access technology. Moreover, Deodato (2015) suggests that for librarians to serve their patrons better, they need to subscribe to the use of a technology that allows patrons to access their preferences from a single interface easily.

According to Thanuskodi (2011) information technology greatly influenced the library services and librarians need to keep on improving their technology to meet and satisfy their patrons' expectation and preferences. Baidwan, Bala, Chadha and Kumari (2011) believe that the surge in technological advances has complicated the way libraries operate and consequently the need to adapt these technologies for the benefit of patrons. However, Jowitt (2008) suggests the need for librarians to investigate whether technology can meet patrons' expectation or preferences with many systems out there. However, Dadzie (2005) stresses the need to increase awareness of the ability of patrons to adapt to new technologies whenever they are available in the library.

Hence, academic libraries need to adapt their services and content to match users' preferences through acquisitions of collections of new and easy to use technologies that satisfy their needs.

Accordingly, Ahmad and Brogan (2012) advise that a considerable portion of the library acquisition budget should be devoted to purchasing of e-books, but librarians must have conducted a needs analysis before such acquisition. Lamothe (2012) explains that librarians need to seek their patron's input to accurately acquire collections that are both beneficial and will increase patronage. However, Omotayo (2006) argues that appropriate funding by sponsors is crucial to make a significant acquisition and for libraries to meet patrons' real requirements. Hence, Bhatti, Batool and Malik (2013) suggest that librarians need to purchase books, materials and e-sources that motivate and inspire patronage among the different categories of patrons. It is, therefore, important for librarians to recognise new and fresh reading materials that attract and inspire users to patronise the library more often.

## 2.9. Motivating patrons through technology

The influence of technology in improving library service and patrons' expectation and preferences is critical. Wilson (1998) found that not all members of academic and research staff and not all students are happy with computer-based access to resources. He argued that many are happy with existing systems and are quite resistant to change. This means that redesigning existing systems is not about new technology but also about changing professional roles and changing the culture of the organisation which is not an easy task. However, it is the responsibility of librarians to catch up with the use of these technologies to motivate increased patronage. In their study, Moyane, Dube and Hoskins (2015) observe that some patrons are still unable to utilise library information resources because they do not have the necessary skill

to access these sources. Likewise, Ezeani, Eke and Ugwu (2015) suggest that to motivate patrons, librarians need to analyse current trends and behaviour patterns among their patrons. Consequently, libraries need to have certain facilities in place to attract patrons to the physical library such as internet workstations, and copiers for scanning, at the same time ensuring that patrons' privacy is well protected (Hess, LaPorte-Fiori and Engwall 2015). Although Hua, Si, Zhuang and Xing (2015) observe that the availability of automation in libraries can help to attract patrons, librarians are still required to provide some personal touch to their services to attract and retain patrons. Jankowska, Hertel and Young (2006), in their study, recognise the difficulty of librarians in effectively and efficiently fully integrating the type of technological expectations that meet patrons' preferences. As such, for libraries to be able to motivate their several patrons through technology, librarians might require a substantial investment in current as well as relevant technology that will satisfy patrons' preferences (Ondieki Makori, 2012).

Hsu, Cummings and Wang (2014), in summarising the work of Gardner and Eng (2005: 405-406), questioned the ability of the physical library to meet patrons' expectations and preferences because search engines such as Google Scholar offer alternative methods of finding resources that do not rely upon a traditional library facility. Madhusudhan and Nagabhushanam (2012) reflect that as more libraries embrace online services and improved e-resource availability, more patrons' preferences will be satisfied and this will provide more attractions for prospective patrons. Moreover, Anafo and Filson, (2014) argue that any attempt to attract potential patrons will be ineffective if their efforts go unnoticed. Also, Matthews (2012) suggests that libraries need to concentrate on those services that encourage patrons to patronise library services. In this regard, Chow and Croxton (2012) explain that, rather than considering the offering of broad-based library services, librarians need to focus on extending personalised

services to improve patrons' relations and further attract more potential patrons. Conversely, to remain relevant in the face of changing technologies (Collins & Quan-Haase, 2014), libraries need to find innovative technologies to reposition themselves without losing existing patrons (Chow & Croxton, 2012). Meanwhile, Ondieki Makori (2012) reflects that since libraries are adopting automation systems, they need to constantly extend personalised services to those patrons who are new to such technology to increase the base of patrons using such technology. Notwithstanding, Blackburn (2011) notes the difficulty of adapting to new technologies because patrons are accustomed to retrieving information in a particular way hence, librarians may need to understand patrons' level of adaptation through patrons' assessment and volume of use.

### 2.10. Web 2.0

Web 2.0 is the use of networks such as the internet, and World Wide Web (www) to provide a platform for networks for library patrons to locate information from different sources thereby meeting their needs (O'Reilly, 2005). Chakravarty and Chopra (2013) indicate that, with the availability of internet and its penetration through the enabling of Web 2.0 technologies, this has provided library patrons with multiple access to information contributing to the surge of freely accessible digital information. Mutula, (2011) reflects that university libraries need to consider ethical and trust issues when using digital technologies to ensure that information and communication technologies meet acceptable scholarly standards on access, usability, productivity. Moreover, Dlab and Hoic-Bozic (2009) argue that the development and design of features of Web 2.0 were unintended for educational use. However, with its positive influence in this field, its contributions to social learning through different tools have made its use imperative, but Fernàndez and Gil-Rodríguez (2011) question the potential of using social

networks as a learning platform. As such, Kwanya, Stilwell and Underwood (2013) see Library 2.0 as an attempt to weaken the role of librarians in the emerging information environment, whereas, Library 3.0 places librarians as significant apomediaries providing directions to "library users on how best to locate, access and use credible information in myriad formats from diverse sources, at the point of need".

# 2.11. The influence of social networking tools on patronage

The use of social media in academic libraries have been found to enhance interactions between librarians and library users; saves time for information searching, accessing and usage; reduce the costs associated with space; and promote use of library services and products (Abok & Kwanya, 2016). Dickson and Holley (2010) found social networking to be an effective approach to reach out to students in academic libraries but Chu and Du (2013) report about the difficulty of attracting patrons to make use of social networking platforms. Libraries need to ensure equal coverage for every discipline and make sure to respect student privacy (Dickson & Holley, 2010) although Charnigo and Barnett-Ellis (2013) raised concerns about the laxity of librarians towards privacy issues. Roblyer, McDaniel, Webb, Herman and Witty (2010) affirm that the increasing acceptance of social networking provides both students and faculty space and an avenue to communicate and contribute successfully to learning. Moreover, Chu and Du (2013:72) reiterate that the benefit of using social networking by academic libraries exceeds its costs and these tools are "perceived to be helpful in promoting library services and interacting with students." Procter, Williams and Stewart (2010) state that despite the increasing use of social networking platforms by both students and faculty, it is not expected that this will create a radical scholarly change but will be used in addition to traditional publications because academics doubt their quality as information sources. In contrast, the lack of adequate ICT infrastructure and human resources could disrupt the effective adoption of social media in the libraries (Abok & Kwanya, 2016). Hence, it appears that academics are only supportive of social media because it provides them with a platform to share their work and relate to a broader scholarly community (Procter *et al* 2010).

#### 2.11.1 Facebook

Dickson and Holley (2010: 473) justify the use of Facebook by academic libraries as the most relevant social networking website on the premise that it has a very "strong user base among college students". In a study by Charnigo and Barnett-Ellis (2013), they reported on how the Facebook availability in a university library had attracted a lot of student traffic to the university's library when students learnt about such a service. Phillips (2011) reports the use of Facebook by academic libraries to cultivate a relationship with students by providing status messages and to engage and establish rapport. Facebook is used by academic libraries to profile themselves and communicate effectively with students and other users (Riza Ayua & Abrizahb, 2011). Aharony (2012b) argues that academic libraries sparingly use Facebook because they doubt the appropriateness of this platform to meet students' expectations since its use raises many ethical concerns about patrons' privacy'. According to Sachs, Eckel and Langan (2011), many university students consider the use of Facebook for academic engagements as a useful medium to learn about library resources, but they think that academic libraries need to strike a balance between providing pertinent and helpful information and preserving patron privacy.

# **2.11.2 Twitter**

There is evidence of the popularity in the use of Twitter accounts among academic libraries to successfully communicate with patrons. However, it varies widely regarding characteristics

(Del Bosque et al., 2012). Williams, Terras and Warwick (2013) observe that the openness and availability of Twitter messages provide a rich dataset for academic researchers, but Ross, Terras, Warwick and Welsh (2011) recognise its link to issues of social etiquette and potential misuse. Kim, Abels and Yang (2012) recognise the fact that the use of Twitter in academic libraries has increased but criticise its use by some academic libraries with no clear published objectives. Al-Daihani and AlAwadhi (2015) explain that academic libraries often use Twitter as a multifaceted tool with the most posts focusing on library collections, library services, library marketing and news, answers and referrals, and books. Additionally, Stvilia and Gibradze (2014) found that the more popular tweets by patrons are those relating to study support services and the building and maintaining of connections with the library community. Shulman, Yep and Tomé (2015) reflect that, by relying on the number of followers to gauge the impact of a Twitter programme, academic libraries should not attempt to ignore that its significance is embedded in its effectiveness as an outreach and dissemination tool of an information network.

## 2.12 Library planning and its influence on patronage

According to Dwivedi, Kapoor, Williams and Williams (2013), library operations and management have concerted efforts to perform several tasks that are repetitive, painstaking, and labour and time intensive efficiently. Despite all efforts to attract patrons and increase patronage, effective library planning is essential. Library planning entails the ability of management to understand and determine those critical issues that will enable librarians to offer services that meet patrons' expectations and preferences (Fisher, 2012). Paterson and Low (2011) contend that planning is a useful tool to promote library development by optimising user needs from the onset. It is needless to try to persuade students to use the library print

collections as this approach may fail if instructors do not require such use from their students or if online alternatives are available" (Martell, 2008). Anafo and Filson (2014) maintain that planning about technical issues helps librarians to allocate resources to library education and development by effectively evaluating patrons' information requirements and meeting them. Additionally, Sookhtanlo, Mohammadi and Rezvanfar (2009) recognise that planning considerations are helpful to make provision to satisfy the different patterns of patrons' information need. Planning provides an atmosphere for updating a resource that takes consideration of the needs of patrons (Sookhtanlo et al 2009). Martell (2008) indicates that it is useless trying to keep patrons tethered to the physical library since they participate in whatsoever strategy works best for them. Therefore, library management should focus on achieving an optimum balance between the stock of electronic sources with sound investments in the print collections. Therefore, Connell (2009) cautions that, with the potential to infringe on students' sense of personal privacy, it is suggested that librarians proceed with caution when implementing online social network profiles. Moreover, Haddow and Joseph (2010) suggest that management of university libraries need to be conversant with those activities and services that improve students' engagement and retention in their planning and funding decisions. Hence, Tuamsuk, Kwiecien and Sarawanawong (2013) proposed a university library management model to support student learning to include "management policy and system; learning resources; learning support services; learning environments; and the competency and roles of information professionals".

## 2.13 Absence of studies of academic library usage by accounting students

Brodsky (2017) argues that there is a challenge with accounting undergraduates' usage of library resources due to the low-level of information and data requirements in their syllabus

due to strict prescription of course-related textbooks. May and Arevalo (1983) reiterates the lack of integration of accounting curriculum with the teaching of effective writing skills in regular accounting courses. Sadler and Erasmus (2005) found that majority of black South African students pursuing an accounting degree lack and are unaware of the importance of sound communication skills both written and verbal in achieving success in their accountancy career.

# 2.14 Summary of chapter

This chapter reviewed extant literature on the level, features and satisfaction of patrons patronising the academic library. Essentially, discussions about the role of the library in student academic success, the diversity of sources and patrons' satisfaction, the motivation of patrons through technology such as Web 2.0 and social networking like Facebook and Twitter were presented. The influence of library planning on patronage was discussed. This chapter concludes with a summary. The next chapter discusses the research methodology of the study.

#### CHAPTER THREE: RESEARCH METHODOLOGY

### 3.1. Introduction

The previous chapter reviewed the relevant literature relating to the research problem identified. This chapter discusses the philosophical assumptions in this study and describes the research design strategies used in the study. Philosophical assumptions are reviewed and presented; the positivist paradigm identified as the framework for the study. Moreover, research methodologies, the research design adopted that includes strategies, data collection instruments and analysis approach and processes used for the study are explained. The details are described in the subsections under appropriate headings.

# 3.2. Research paradigm

This study follows the ontological level of positivism which assumes that reality is objectively given and measurable independent of the researcher, that is, reality is objective and quantifiable. In adopting the positivist paradigm, proponents use scientific methods in the knowledge generation process through quantification to augment correctness to represent parameters and their relationships. This is because the positivists see human behaviour as being passive, influenced and determined by the external environment. The positivist paradigm is characterised by different theories and practices that include logical positivism, cognitive science, behaviourism and empiricism. Despite the efficient use of the positivist paradigm, critics argued that its lack of subjectivity in interpreting social reality is a weakness. Hence, critics proposed the substitution of subjectivity by objective stance in the scientific process of inquiry. They have therefore proposed two alternatives, the interpretive constructionism and critical postmodernism. According to Henning, Van Rensburg and Smit (2004), positivists seek

to uncover truth which they present through empirical evidence. A paradigm is a worldview, which defines, for its holder the individual's place in it, and the range of possible relationships between that world and its parts, as, for example, cosmologies do (Guba & Lincoln, 1994). This means that a paradigm is a research culture with a set of beliefs, values and assumptions that a group of researchers holds in common in the conduct of scientific inquiry. The positivist assumes at the ontological level that knowledge is objective and quantifiable. The positivist adopts scientific methods to generate quantifiable knowledge to enhance precision when describing parameters and their relationships. However, critics of the ontological positivism suggest that objectivity replaces subjectivity in the process of scientific inquiry. Following the ontological level research purpose, the researcher assumed that many social realities exist due to varying human experience, in this case, student experiences regarding library patronage vary, and these variations include students' knowledge, views, interpretations and experiences about accessing library sources.

## 3.3. Research design and method

The current study used a survey research design to address the research problem. The central purpose of this study is to determine and make a comparison between the use of academic libraries by students of accounting at university-level in a contact learning institution like the University of Limpopo (UL) and open distance learning institution like the University of South Africa (UNISA), both in South Africa. Below are key aspects of the chapter.

Table 3. 1: Summary of key aspects of the chapter

Research aspect/component	Choice within this study
Research paradigm	Positivism
Research design	Survey
Research method	Survey

The relative absence of studies of academic library usage by accounting students, especially in South Africa, has prompted the use of a survey as part of the research design. According to Creswell (2013), research design is the overall decision involving the approach used to study a topic that is informed by philosophical assumptions the researcher brings to the study and specific research methods of data collection, analysis and interpretation. The purpose of using the survey design is to use the selected sample of the population to determine the current state of library patronage among accounting students in the selected universities. The justification for this design stems from the economy of the design and ability for a quick turnaround in data collection.

The study used a survey research method which follows from the survey research design. In assessing the current level of patronage among accounting students at universities in one contact, and one distance learning institution in South Africa, the researcher engaged only students studying accounting as their principal subject. Research methods include all the methods used by a researcher during a research study. They include theoretical procedures, experimental studies, numerical schemes and statistical approaches.

# 3.4. Research population

The study population is accounting students from UNISA and UL. Population per institution is based on the number of registered accounting students in second and third years of study.

The reason for selecting these groups is the assumption made by the researcher that they have experienced library services for at least one year of their study.

Participants were 250 university accounting students from UNISA and 250 from UL. The sample of 250 was randomly selected. It was difficult to get the official number of students from both institutions. Moreover, to enable statistical analysis to be performed, it is standard to have more over 250 observations. The students included both male and female accounting students from both institutions who are in the third year and above in their studies. The reason for selecting these sets of students was to benefit from their extended stay and assumed experience of academic library use. Students who are in the higher level of study might have reasons to have visited the library during their years of study at the institution and likely to be more disposed to respond objectively to questions posed. First-year students are considered inexperienced in this instance.

The objective of this engagement is to gather valid responses from these sets of students about their library experience. Gathering information on students' patronage from library records is not feasible because a preliminary inquiry at both institutions indicate that such records were inaccessible and unavailable. Moreover, librarians at both institutions stated that their library records do not include such details as a specific number of students from a discipline and because the Protection of Personal Information legislation in South Africa prohibits exposure of such information to a third party without the express consent of the individual involved. Also, in-depth interviews with the librarians to get their perception about library patronage by accounting students in accessing library resources such as books and other loanable resources was not possible due to their lack of records about such use. Hence, the study focused on accounting students who are the selected participants. The researcher hoped that by engaging

directly with accounting students, their responses would provide useful suggestions and recommendations about what features can attract them to use the library more frequently. In determining what improvements might lead to increased use by these students, the researcher used a structured questionnaire to solicit responses from accounting students of both institutions. Hence, the researcher considered all second and third year accounting students in each of the institutions.

## 3.5. Research sample

The study used the stratified sampling method. The preferred sampling technique was the stratified random sampling technique meaning that each student each student within the group is capable of being selected with specific individual characteristics such as gender and year of study represented in the sample (Creswell, 2013). This technique allowed the entire population to be split into different subgroups or strata which enabled the final subjects to be randomly selected proportionally from the chosen strata. Moreover, the selected strata were formed based on shared attributes or characteristics. These strata were selected because the researcher assumed they had acquired experience to provide reliable responses to the study questionnaire based on their patronage and usage of library resources in each of these institutions. All second and third years accounting students from both institutions were expected to complete the questionnaire. This stratum was selected because the researcher assumed they had acquired experience to provide reliable responses to the study questionnaire based on their patronage and usage of library resources in each of these institutions.

#### 3.6. Data collection

The study collected data using the survey approach that utilises a structured questionnaire to determine the usage of academic library resources and how to improve on the challenges faced by a contact learning institution and open distance learning universities in South Africa. Data were collected simultaneously from respondents of both institutions. In the distance learning institution, data was collected through a visit to both the Polokwane and Sunnyside Campuses where structured questionnaires were administered during specified tutorial weekend classes because it was the easier method for this group of students. For respondents at the contact learning institution, data was collected through group administration during lectures in the contact learning or tutorial classes at the distance learning university (Fink, 2012). Group administration of questionnaire was used for this group of students because not all the students can access the survey online.

#### 3.7. Data instrument

A self-report questionnaire measured the key variables in this study. The first part of the instrument included demographic characteristics of gender, year in university, and type of institution. The rest of the questionnaire assessed the variables in the research questions.

Data was collected using closed-ended structured questionnaires using the Likert Scale with intervals 1-5, beginning with Strongly Agree to Strongly Disagree: Likert items are used to measure respondents' attitudes to a statement findinging in ordinal data type. A Likert scale measures the extent of a participant's agreement or disagreement with the declaration (Creswell, 2013). The researcher developed the questionnaire (see Appendix A) in line with the research objectives of the study. Section A that includes questions 1-5 focused on

biographic questions such as level of study; mode of study; type of university; age group of respondents and gender. Section B focused on respondents' use of library and information services. Question 6-8 is channelled to resolving the first research objective, that is, to assess the current level of patronage among university accounting students in a contact and a distance learning institution in South Africa. Questions 9-11 was used to answer research question three, that is, to determine what features would make the use of a library for locating information that is relevant and attractive to university accounting students in a contact and a distance learning institution in South Africa. Question 12 was used to resolve research question two, that is, to investigate the reasons for low level of library patronage among accounting students in South African Universities. Question 13 focused on investigating suggestions for improvements to library services that can be made. The rationale for using the structured questionnaire method of data collection is on asking only close-ended questions. It is a quantitative method of research advocated by Émile Durkheim (1858-1917) (Tiryakian, 1966). This research method follows the positivist research approach. It allows a high number of respondents with a low-level involvement by the researcher.

### 3.8. Data analysis

Collected data was entered into MS Excel sheet using study variables as columns and the different questions as rows. In this study, collected data was analysed using Kendall's Tau-b coefficient analysis technique run with the Stata statistical analysis application. The Kendall's correlation between two variables is high when observations have a similar (or identical for a correlation of 1) rank. The study chose to do correlation and specifically measuring ordinal associations to ensure that respondents' observation of the phenomena is subjected to statistical analysis to enable deductions to be made. There are two accepted measures of non-parametric

rank correlations, Kendall's Tau and Spearman's (rho) rank correlation coefficient that measure the strength of the relationship between two variables. A non-parametric hypothesis test is necessary for this study since the intention is to measure the degree or level of agreement among the various responses. Moreover, the options for assessing rank correlation is suitable for the study due to the structured nature of questionnaire using ordinal scale to rate the level of agreement of responses in relation to the significance of respondents' perception. Kendall's Tau-b was selected over the Spearman's *rho* because it was more meaningful when the data contained many tied ranks. The choice of Tau-b is because it adjusts for ties since Tau-a was not selected because it does not make adjustment for ties and Tau-c was not considered though the underlying scales of variables are sometimes 3, 4, 5 or 6 because the Tau-b becomes more meaningful when data contained many tied ranks. In addressing the challenges faced by accounting students' library patronage in a contact learning institution and open distance learning universities in South Africa, the nonparametric statistical method of correlation analysis, Kendall's Tau-b was applied. The significance level was defined at *p*=0.05.

The Kendall rank coefficient is used as a test statistic in a statistical hypothesis test to establish whether two variables may be regarded as statistically dependent. This test is non-parametric with values range from -1 (100% negative association, or perfect inversion) to +1 (100% positive association, or perfect agreement). A value of zero indicates the absence of association.

## 3.9. Reliability and validity tests

In this study, measures to ensure validity were taken. The study used and adapted structured questionnaire that had been developed and tested to determine users' satisfaction in the field of information studies. These include administering the questionnaire during the academic session

in both institutions to get responses from participants (accounting students) who are in the second year and above of their study after given them a choice to either voluntarily participate or opt out. The survey excluded first year students from the study because of their assumed lack of library user experience. Reliability is concerned with the replicability of the findings while validity is concerned with whether the study instrument accurately measures what it is intended to measure (Golafshani, 2003). According to Wilson (2014) reliability issues are closely associated with subjectivity, and once a researcher adopts a subjective approach towards the study, then the level of reliability of the work is compromised.

Oliver (2010) considers validity to be a compulsory requirement for all types of studies. The validity of research can be explained to the extent that requirements of scientific research method have been followed during the process of generating research findings. There are different forms of research validity, and main ones are specified by Cohen, Manion and Morrison (2013) as content validity, criterion-related validity, construct validity, internal validity, external validity, concurrent validity and face validity.

In ensuring validity, the researcher personally distributed the questionnaires to the respondents after soliciting their cooperation. The researcher adopted the focused group approach to questionnaire administration by personally administering and collecting them after they were filled. The researcher allowed respondents 15 minutes to complete an individual questionnaire after explaining the purpose of the study and that they were free to leave any question unanswered if they so desired. It is important to understand that although threats to research reliability and validity can never be eliminated, the researcher strived to minimise this threat as much as possible by taking the above measures.

#### 3.10. Ethical consideration

The researcher requested ethical clearance from the College of Human Sciences (CHS) of UNISA to enable the administration and collection of data since it involves people responding to structured questionnaires (see APPENDIX B). The researcher got clearance from both institutions to conduct this study. The respondents selected for this survey were students of accountancy from UNISA and UL. Respondents were advised about the nature of the study and could choose whether to participate. The researcher endeavoured to report the findings completely and honestly without misrepresenting or compromising the outcome of the study. Respondents were not required to disclose their identities since they were only required to respond to the structured questionnaires provided. The researcher informed respondents that the data collected through questionnaire administration is solely for this study and will subsequently be discarded.

## 3.11. Limitation of the study

Although the study has achieved its objectives, there were some certain limitations. First is the time limit. The study was conducted in one contact university and one distance learning institution. In generalising the findings for larger groups, the study could have involved more institutions. Second, because some students failed to respond to the questionnaire, the researcher had to make several visits to UNISA study centres to collect completed questionnaires from participants and this intervention may have affected their responses.

# 3.12. Summary of chapter

The chapter outlines the research procedure used for the study. The research design, method, population and sample was discussed. The chapter discussed the questionnaire as the data collection instrument and addressed ethical clearance issues. Data analysis method was defined. The next chapter presents the finding of the survey and discussions as well as interpretation of findings.

# CHAPTER FOUR: PRESENTATION OF FINDINGS, INTERPRETATION AND DISCUSSION

### 4.1. Introduction

The previous chapter describes the general research methodology of the study. This chapter presents the findings, interpretation and discussion of findings. Section 4.2 explains the finding of the study and explains the descriptive survey statistics; Section 4.3 documents and explains summary statistics in Tables 4.2 to 4.36. Furthermore, Section 4.3 discusses Kendall's Tau-b correlation coefficient of the key variables from the data analysis represented by Table 4.37. Section 4.5 provides a discussion of the finding of the study. Section 4.6 concludes the chapter with a summary of the chapter.

# 4.2. Findings of the study

This section explains the finding of the study. The analysis was based on the non-parametric statistical method, Kendall's Tau-b coefficient, that seeks to measure the correlation of agreement among the responses of participants to specific questions. The survey's descriptive statistics are presented below in Table 4.1. It explains the total number of observation in the study.

**Table 4. 1: Descriptive survey statistics** 

Variable	Obs	Mean	Std. Dev.	Min	Max
Level of study	379	1.205805	0.482353	1	4
Mode of study	379	1.488127	0.505778	1	3
Name of institution	379	1.575198	0.560156	1	6
Age group	379	2.002639	1.019645	1	6
Gender	376	1.31117	0.557597	0	2
Branch of library used	379	1.543536	0.848328	0	6
Frequency of library visit	375	3.541333	1.557378	0	6
Frequency of access to library and information services	375	3.757333	1.614537	0	6
Looked for library material on the shelves	376	2.047872	1.108919	0	6
Interaction with library staff	375	2.016	1.021041	0	5
Borrowed library materials	374	1.877005	1.051416	0	5
Used a computer in the library	371	2.425876	1.356378	0	5
Used the library catalogue	370	2.181081	1.151019	0	5
Made a reservation on the library system	370	2.410811	1.186597	0	5
Renewed a loan on the library system	368	2.298913	1.298836	0	5
Used an electronic journal	367	2.444142	1.270305	0	5
Used an electronic resource (e.g. Web of Knowledge)	368	2.296196	1.300508	0	5
Range of Books	370	2.094595	1.172967	0	5
Course related books and texts	373	2.310992	1.135835	0	5
Range of e-books	371	2.520216	1.199773	0	5
Range of print journals	364	2.489011	1.216231	0	5
Range of electronic journals	359	2.417827	1.171503	0	5
Photocopying	369	1.859079	1.465799	0	23
Printing	372	1.766129	0.985957	0	5
Study facilities (study desk, etc.)	371	1.93531	1.083597	0	5
Provision of working computers	370	2.454054	1.302196	0	5
Reliability of computers	368	2.404891	1.296265	0	5
Library catalogue	367	2.231608	1.067802	0	5
Library website (other than library catalogue)	367	2.149864	1.06709	0	5
Range of electronic resources (e.g. Web of Knowledge)	368	2.271739	1.142236	0	5
Opening hours	372	1.905914	1.129973	0	5
Library environment (noise, heating, ambience, etc.)	369	1.918699	1.20637	0	5
Helpfulness of the library staff	372	1.916667	1.033687	0	5
Expertise of the library staff	372	1.94086	0.996894	0	5
Overall the library provides a good service	374	1.946524	0.886192	0	5

Source: Field data (2018).

Total estimation Number of obs = 330;

Where: #obs is the number of observations of respondents that completed all the questions in the questionnaire.

Descriptive statistics allow the researcher to describe many pieces of data with a few indices.

The survey data captured data for 35 variables making 379 observations in total. In Table 4.1, the total number of observed respondents is 379 out of the 500 questionnaires distributed which is 76% of the total sample size. However, the number of complete observations or number of respondents that responded to all the questions in the questionnaire is 330, which is 87% of total observations.

The participants were responding to the research questions posed in this study. The responses provide data for the study that seeks to clarify the following research questions:

- What are the reasons for low level of library patronage among accounting students in South African Universities?
- What features would be required to make the use of a library for locating information relevant and attractive to university accounting students in a contact and a distance learning institution in South Africa?
- What improvements are required to make the use of the library of significant importance to university accounting students patronise library services in a contact and a distance learning institution in South Africa?

The next section discusses the summary statistics of data in the study.

## 4.3. Summary Statistics

*In Table 4.2, respondents were asked to mention their level of study.* 

Table 4. 2: Level of study of respondents

Level of Study	Frequency	Percentage	<b>Cumulative Percentage</b>
Undergraduate	313	82.59	82.59
Postgraduate (Taught Course)	55	14.51	97.1
Postgraduate (Research)	10	2.64	99.74
Others	1	0.26	100
Total	379	100	

Source: Field data (2018).

Table 4.2 presents a descriptive analysis of respondents' level of study. Of the respondents, 313 (83%) are undergraduates, fifty-five, or 15% are postgraduate (taught-course), ten or 3% are postgraduate (research). One respondent did not indicate his/her level of study. This data is an indication that most university accounting students are undergraduates meaning that comparatively-few students are presently registered for postgraduate studies in accounting.

*In Table 4.3, respondents were asked to mention their mode of study.* 

**Table 4. 3: Mode of study of respondents** 

<b>Mode of Study</b>	Frequency	Percentage	<b>Cumulative Percentage</b>
Full-Time	195	51.45	51.45
Part-Time	183	48.28	99.74
No response	1	0.26	100
Total	379	100	

Source: Field data (2018).

In Table 4.3, there is an almost equal representation of respondents between the full-time (accounting students from the contact university) and part-time (accounting students from the distance learning university) students of 195 (52%) and 183 (48%) respectively. This near-

equal representation provides a good basis for assessing the perception of library usage by participants.

In Table 4.4, respondents were asked to mention the institution attended.

Table 4. 4: Institution attended by respondents

Institution attended	Frequency	Percentage	<b>Cumulative Percentage</b>
University of South Africa	171	45.12	45.12
University of Limpopo	208	54.88	100
Total	379	100	

Source: Field data (2018).

The questionnaire was distributed to students in both institutions (the University of South Africa and University of Limpopo), and the researcher's findings indicate that the University of Limpopo accounting students visit the library more than those who attend classes on part-time basis. In Table 4.4, 208 (55%) of the respondents are from a contact learning institution (University of Limpopo, UL) while 171 (45%) of the respondents are the students who attend distance learning institution (University of South Africa, UNISA).

In Table 4.5, respondents were asked to state their age group.

**Table 4. 5: Age group of respondents** 

Age group	Frequency	Percentage	<b>Cumulative Percentage</b>
21 years and under	146	38.52	38.52
22-26 years	124	32.72	71.24
27-39 years	82	21.64	92.88
40-49 years	17	4.49	97.36
50 years and above	9	2.37	99.74
No response	1	0.26	100
Total	379	100	

# Source: Field data (2018).

Table 4.5 indicates 146 or 39% of the respondents are between the age 21 years and under. 124 (33%) of the respondents are between the age 22 to 26, eighty-two, or 22% are between age 27-39, 17 (4%) are between 40-49 years while those above 50 years are 9 (2%) of the respondents. However, one of the respondents gave no response.

*In Table 4.6, respondents were asked to state their gender.* 

**Table 4. 6: Gender of respondents** 

Gender	Frequency	Percentage	<b>Cumulative Percentage</b>
Female	223	59	59
Male	135	36	95
No	21	5	100
Response			
Total	379	100	

Source: Field data (2018).

The total number of respondents for both institutions was 379. As it shows in Table 4.6, 223 (59%) of the respondents from both institutions are female while 135 (36%) are male. However, 21 (5%) of the respondents failed to respond to this question. This indicates that female accounting students patronise library services in this table more than their male counterpart.

*In Table 4.7, respondents were asked to mention the branch of library used.* 

Table 4. 7: Branch of library used by respondents

Branch of library used	Frequency	Percentage	<b>Cumulative Percentage</b>
Main Library	241	63.93	63.93
Learning Resources Centre	74	19.63	83.55
Not Applicable	56	14.85	98.41
No response	6	1.59	100
Total	377	100	

Source: Field data (2018).

Table 4.7 indicates that the number of respondents using the main library are more than those who are using learning resources centre and others. The table reveals that 241 (64%) and 74 (20%) of respondents from both institutions are using the main library and learning resource centre respectively while the rest of the respondents say they used neither.

In Table 4.8, respondents were asked to mention their frequency of library visit.

Table 4. 8: Frequency of library visit by respondents

Frequency of library visit	Frequency	Percentage	<b>Cumulative Percentage</b>
Several times a day	43	11.53	11.53
Once a day	38	10.19	21.72
Several times a week	125	33.51	55.23
Once a week	63	16.89	72.12
Less than once a week	42	11.26	83.38
Less than once a month	62	16.62	100
Total	373	100	

Source: Field data (2018).

Table 4.8 indicates that approximately 34% of respondents visited the library numerous times in a week. Sixty-three, or 17% of the respondents only visit the library once in a week, while the rest of the respondents seldom use the library.

In Table 4.9, respondents were asked to mention their frequency of access to library and information services.

Table 4. 9: Frequency of access to library and information services by respondents

Frequency of access to library and			Cumulative
information services	Frequency	Percentage	Percentage
Several times a day	39	10.43	10.43
Once a day	46	12.3	22.73
Several times a week	86	22.99	45.72
Once a week	71	18.98	64.71
Less than once a week	56	14.97	79.68
Less than once a month	76	20.32	100
Total	374	100	

Source: Field data (2018).

Table 4.9 indicates that 85 or 23% of the respondents' frequently access library and information services while 20% of the respondents' access library less than one month and 19% access library once in a week.

In Table 4.10, respondents were asked to mention their level of success with respect to searching for library materials on the shelves.

Table 4. 10: Looked for library material on the shelves by respondents

Looked for library material on the			Cumulative
shelves	Frequency	Percentage	Percentage
Very successful	134	35.92	35.92
Fairly successful	140	37.53	73.46
Neither successful nor unsuccessful	58	15.55	89.01
Fairly unsuccessful	25	6.7	95.71
Very unsuccessful	14	3.75	99.46
No response	2	0.54	100
Total	373	100	

Source: Field data (2018).

Table 4.10 indicates that 38% of respondents from both institutions access library materials by searching for materials through the shelves while 36% sought help from library staff. This means that a considerable number of accounting students in these universities find books and other materials from the library shelves and the rest are the respondents who find it difficult to access library materials from library shelving.

In Table 4.11, respondents were asked to mention their level of success with respect to their interactions with library staff.

Table 4. 11: Interaction with library staff by respondents

Interaction with librarian staff	Frequency	Percentage	<b>Cumulative Percentage</b>
Very successful	119	32.25	32.25
Fairly successful	158	42.82	75.07
Neither successful nor unsuccessful	57	15.45	90.51
Fairly unsuccessful	25	6.78	97.29
Very unsuccessful	10	2.71	100
Total	369	100	

Source: Field data (2018).

Table 4.11 reveals that 75% of the respondents found the interaction with librarians either very successful or fairly successful. 15% found their interactions with librarians as neither successful nor unsuccessful. However, about 9% of the respondents found their interactions with librarians as either fairly unsuccessful or very unsuccessful.

In Table 4.12, respondents were asked to mention their level of success with respect to borrowing of library materials.

Table 4. 12: Borrowing of library materials by respondents

<b>Borrowing of library materials</b>			
	Frequency	Percentage	<b>Cumulative Percentage</b>
Very successful	160	43.24	43.24
Fairly successful	132	35.68	78.92
Neither successful nor unsuccessful	50	13.51	92.43
Fairly unsuccessful	12	3.24	95.68
Very unsuccessful	16	4.32	100
Total	370	100	

Table 4.12 revealed that 79% of the respondents agreed to have successfully borrowed materials from the library while 13% have neither successfully nor unsuccessfully borrowed materials from the library. Meanwhile, a small number of the respondents (about 8%) indicate that they are unsuccessful with borrowing necessary materials from the library.

In Table 4.13, respondents were asked to mention their level of success with respect to using computer available in the library.

Table 4. 13: Use of a computer in the library by respondents

Used a computer in the library	Frequency	Percentage	<b>Cumulative Percentage</b>
Very successful	96	26.45	26.45
Fairly successful	121	33.33	59.78
Neither successful nor unsuccessful	73	20.11	79.89
Fairly unsuccessful	22	6.06	85.95
Very unsuccessful	51	14.05	100
Total	363	100	

Source: Field data (2018).

Table 4.13 indicates that about 60% of the respondents have successfully used the library's computers for their work while 20% assert that they are unsure whether the computers in the

library are suitable to their needs. Another 20% found their use of library computers s unsuccessful.

In Table 4.14, respondents were asked to mention their level of success with respect to using library catalogue.

Table 4. 14: Used of the library catalogue by respondents

Used the library catalogue	Frequency	Percentage	<b>Cumulative Percentage</b>
Very successful	102	28.41	28.41
Fairly successful	126	35.1	63.51
Neither successful nor unsuccessful	93	25.91	89.42
Fairly unsuccessful	16	4.46	93.88
Very unsuccessful	22	6.12	100
Total	359	100	

Source: Field data (2018).

Table 4.14 shows that 64% of the respondent have successfully used the library catalogue to search for library materials and 26% of the respondents neither successfully nor unsuccessfully used library catalogue while the other 11% have unsuccessfully accessed the library catalogue.

In Table 4.15, respondents were asked to mention their level of success with respect to making a reservation on the library system.

Table 4. 15 Made a reservation on the library system by respondents

Made a reservation on the library			Cumulative
system	Frequency	Percentage	Percentage
Very successful	62	17.42	17.42
Fairly successful	136	38.2	55.62
Neither successful nor unsuccessful	101	28.37	83.99
Fairly unsuccessful	30	8.43	92.42
Very unsuccessful	27	7.58	100
Total	356	100	

In making library reservations, the finding shows that 56% of the respondents are successful. However, 28% of the respondents were neither successful nor unsuccessful in making a reservation on the library system while the remaining 16% claimed they have been unsuccessful in making a reservation on the library system.

In Table 4.16, respondents were asked to mention their level of success with respect to renewal of loan on the library system.

Table 4. 16: Renewed a loan on the library system by respondents

Renewed a loan on the library			Cumulative
system	Frequency	Percentage	Percentage
Very successful	106	29.78	29.78
Fairly successful	103	28.93	58.71
Neither successful nor unsuccessful	90	25.28	83.99
Fairly unsuccessful	21	5.9	89.89
Very unsuccessful	36	10.11	100
Total	356	100	

Source: Field data (2018).

In renewing a library loan of the system, only 59% of the respondents were successful according to the finding in Table 4.16. 25% of the respondents were neither successful nor

unsuccessful in renewing a loan in the library system, but the remaining 16% were unsuccessful in renewing their library loan.

In Table 4.17, respondents were asked to mention their level of success with respect to accessing electronic journal available in the library.

Table 4. 17: Used of electronic journal by respondents

Used an electronic journal	Frequency	Percentage	<b>Cumulative Percentage</b>
Very successful	69	19.71	19.71
Fairly successful	110	31.43	51.14
Neither successful nor unsuccessful	111	31.71	82.86
Fairly unsuccessful	25	7.14	90
Very unsuccessful	35	10	100
Total	350	100	

Source: Field data (2018).

As it shows in Table 4.17, 51% of the respondents claim that they have successfully used or accessed an electronic journal through the library system though a high percentage (32%) of the respondents have neither successfully nor unsuccessfully used an electronic journal in their library. Moreover, 17% of the respondents have been unsuccessful in their use of the range of electronic journals.

In Table 4.18, respondents were asked to mention their level of success with respect to using the array of electronic resources available in the library.

Table 4. 18: Used of electronic resource (e.g. Web of Knowledge) by respondents

Used an electronic resource (e.g. Web of Knowledge)	Frequency	Percentage	Cumulative Percentage
Very successful	109	30.53	30.53
Fairly successful	102	28.57	59.1
Neither successful nor unsuccessful	88	24.65	83.75
Fairly unsuccessful	22	6.16	89.92
Very unsuccessful	36	10.08	100
Total	357	100	

Table 4.18 shows that 211 (59%) of the respondents agreed to have used an electronic resource like the Web of Knowledge in the library. However, 25% of the respondents have neither successfully nor unsuccessfully used an electronic resource such as the Web of Knowledge before. In contrast, 16% of the have unsuccessfully accessed electronic resources such as the Web of Knowledge in the library.

In Table 4.19, respondents were asked to mention the level of satisfaction with respect to the range of books available in the library.

Table 4. 19: Level of satisfaction with range of books accessed by libraries

Range of Books	Frequency	Percentage	<b>Cumulative Percentage</b>
Very satisfied	123	33.61	33.61
Fairly satisfied	153	41.8	75.41
Neither satisfied nor dissatisfied	41	11.2	86.61
Fairly dissatisfied	22	6.01	92.62
Very dissatisfied	27	7.38	100
Total	366	100	

Source: Field data (2018).

In determining whether respondents are satisfied with the range of books available in their library, 75% claim a high level of satisfaction with about 11% neither satisfied nor unsatisfied

with the range of books in the library collection as depicted in Table 4.19. Contrastingly, only 13% of the respondents were unsatisfied with the range of books in their relevant subject area on display in their library collection.

In Table 4.20, respondents were asked to mention the level of satisfaction with respect to the quality of course-related textbooks available in the library.

Table 4. 20: Course-related books and texts accessed by respondents

Course-related books and texts	Frequency	Percentage	<b>Cumulative Percentage</b>
Very satisfied	84	22.7	22.7
Fairly satisfied	162	43.78	66.49
Neither satisfied nor dissatisfied	67	18.11	84.59
Fairly dissatisfied	32	8.65	93.24
Very dissatisfied	25	6.76	100
Total	370	100	

Source: Field data (2018).

In determining whether respondents are satisfied with the current course related books and texts in their library collections on display, 66% assert that they are pleased as shown in Table 4.20. Moreover, 18% of the respondents were neither satisfied nor dissatisfied with the volume of course related books and texts available in their library collection. However, 15% of the respondents are relatively dissatisfied with the current amounts of course related textbooks they got from their library.

In Table 4.21, respondents were asked to mention the level of satisfaction with respect to range of e-books available in the library.

Table 4. 21: Range of e-books accessed by respondents

Range of e-books	Frequency	Percentage	<b>Cumulative Percentage</b>
Very satisfied	61	16.99	16.99
Fairly satisfied	113	31.48	48.47
Neither satisfied nor dissatisfied	122	33.98	82.45
Fairly dissatisfied	33	9.19	91.64
Very dissatisfied	30	8.36	100
Total	359	100	

In Table 4.21, 48% of the respondents are satisfied with the range of collection of e-books within their library system. Additionally, a high percentage (34%) of the respondents are neither satisfied nor dissatisfied with the range of electronic books in their library collection. However, 18% are not satisfied with the range of electronic books in their library collection.

In Table 4.22, respondents were asked to mention the level of satisfaction with respect to range of print journals available in the library.

Table 4. 22: Range of print journals accessed by respondents

Range of print journals	Frequency	Percentage	<b>Cumulative Percentage</b>
Very satisfied	62	17.66	17.66
Fairly satisfied	116	33.05	50.71
Neither satisfied nor dissatisfied	109	31.05	81.77
Fairly dissatisfied	35	9.97	91.74
Very dissatisfied	29	8.26	100
Total	351	100	

Source: Field data (2018).

The findings revealed in Table 4.22 that 51% of the respondents are satisfied with the range of print journals in their library collection while 31% are neither satisfied nor dissatisfied with the

range of print journals they got from the library. Meanwhile, 18% of the respondents are very dissatisfied with the range of print journals available in their library collection.

In Table 4.23, respondents were asked to mention the level of satisfaction with respect to range of electronic journals available in the library.

Table 4. 23: Range of electronic journals accessed by respondents

Range of electronic journals	Frequency	Percentage	<b>Cumulative Percentage</b>
Very satisfied	67	19.31	19.31
Fairly satisfied	115	33.14	52.45
Neither satisfied nor dissatisfied	112	32.28	84.73
Fairly dissatisfied	30	8.65	93.37
Very dissatisfied	23	6.63	100
Total	347	100	

Source: Field data (2018).

In determining respondents' satisfaction with the range of electronic journals available in their library, 52% of the respondents claim they are satisfied but a high number of the respondents (112 (32%)) are neither satisfied nor dissatisfied with the range of electronic journal currently in their library collection. However, 15% of the respondents are not satisfied with the range of electronic journals available in their library collection.

In Table 4.24, respondents were asked to mention the level of satisfaction with respect to photocopying services provided by the library.

Table 4. 24: Photocopying services used by respondents

Photocopying	Frequency	Percentage	<b>Cumulative Percentage</b>
Very satisfied	155	42.82	42.82
Fairly satisfied	141	38.95	81.77
Neither satisfied nor dissatisfied	42	11.6	93.37
Fairly dissatisfied	15	4.14	97.51
Very dissatisfied	8	2.21	99.72
No response	1	0.28	100
Total	362	100	

Findings in Table 4.24 shows that a high number of the respondents (296 or 82%) are satisfied with the photocopying services they receive from the library. Forty-two, or 12% of the respondents are neither satisfied nor dissatisfied with the photocopying services in the library whereas 6% of the respondents are not satisfied with the photocopying services in their library. However, one of the respondents gave no response to this question.

In Table 4.25, respondents were asked to mention the level of satisfaction with respect to printing services provided by the library.

Table 4. 25: Printing services used by respondents

Printing	Frequency	Percentage	<b>Cumulative Percentage</b>
Very satisfied	165	45.45	45.45
Fairly satisfied	133	36.64	82.09
Neither satisfied nor dissatisfied	45	12.4	94.49
Fairly dissatisfied	9	2.48	96.97
Very dissatisfied	11	3.03	100
Total	363	100	

Source: Field data (2018).

In Table 4.25, respondents show their satisfaction or dissatisfaction about their use of printing services for their computer output within the library. About 82%% of the respondents are very

pleased with the way they print in the library. Meanwhile, 12% of the respondents neither satisfied nor dissatisfied with their library printing services. However, 5% of the respondents are dissatisfied with their library printing services.

In Table 4.26, respondents were asked to mention the level of satisfaction with respect to study facilities in the library.

Table 4. 26: Study facilities (study desk, etc.) used by respondents

Study facilities (study desks, etc.)	Frequency	Percentage	<b>Cumulative Percentage</b>
Very satisfied	147	40.05	40.05
Fairly satisfied	141	38.42	78.47
Neither satisfied nor dissatisfied	46	12.53	91.01
Fairly dissatisfied	14	3.81	94.82
Very dissatisfied	19	5.18	100
Total	367	100	

Source: Field data (2018).

In Table 4.26, it shows that 78% of the respondents are satisfied with the array of study facilities in the library. Forty-six, or 13% of the respondents claim they are neither satisfied nor dissatisfied with the available study facilities in their library and may need to expand the library to contain more students to study in the library. However, 9% of the respondents are dissatisfied with the available study facilities in their library.

In Table 4.27, respondents were asked to mention the level of satisfaction with respect to the availability of working computers in the library.

Table 4. 27: Provision of working computers for respondents by the library

<b>Provision of working computers</b>	Frequency	Percentage	<b>Cumulative Percentage</b>
Very satisfied	84	23.27	23.27
Fairly satisfied	125	34.63	57.89
Neither satisfied nor dissatisfied	72	19.94	77.84
Fairly dissatisfied	42	11.63	89.47
Very dissatisfied	38	10.53	100
Total	361	100	

Table 4.27 indicates that 58% of the respondents are satisfied with the provision of computers available in the library whereas 20% show neither satisfaction nor dissatisfaction with the provision of computers in their library. However, 22% of the respondents are dissatisfied with the provision of computers in their library.

In Table 4.28, respondents were asked to mention the level of satisfaction with respect to reliability of the library computers that is working.

Table 4. 28: Reliability of available computers to the respondents

Reliability of working computers	Frequency	Percentage	<b>Cumulative Percentage</b>
Very satisfied	86	24.02	24.02
Fairly satisfied	128	35.75	59.78
Neither satisfied nor dissatisfied	70	19.55	79.33
Fairly dissatisfied	37	10.34	89.66
Very dissatisfied	37	10.34	100
Total	358	100	

Source: Field data (2018).

In Table 4.28, 60% of the respondents indicate that the available working computers in their library are reliable. Moreover, 20% of the respondents are neither satisfied nor dissatisfied with

how reliable their library computers are. In contrast, 20% of the respondents are dissatisfied about the reliability of their library's computers.

In Table 4.29, respondents were asked to mention the level of satisfaction with respect to usefulness of the library catalogue.

Table 4. 29: Library catalogue usage by respondents

Library catalogue	Frequency	Percentage	<b>Cumulative Percentage</b>
Very satisfied	87	24.3	24.3
Fairly satisfied	125	34.92	59.22
Neither satisfied nor dissatisfied	120	33.52	92.74
Fairly dissatisfied	8	2.23	94.97
Very dissatisfied	18	5.03	100
Total	358	100	

Source: Field data (2018).

As indicated in Table 4.29, 212 (59%) of the respondents are either very satisfied or fairly satisfied with the use of library catalogue while 120 (34%) are neither satisfied nor dissatisfied with their use of library catalogue in searching for resources. However, a small percentage of the respondents, about 7%, indicate their dissatisfaction with using library catalogue when searching for materials on library shelve.

In Table 4.30, respondents were asked to mention the level of satisfaction with respect to instructiveness and usefulness of the library website.

Table 4. 30: Library website (other than library catalogue) usage by respondents

Library website (other than library			Cumulative
catalogue)	Frequency	Percentage	Percentage
Very satisfied	101	28.13	28.13
Fairly satisfied	134	37.33	65.46
Neither satisfied nor dissatisfied	88	24.51	89.97
Fairly dissatisfied	24	6.69	96.66
Very dissatisfied	12	3.34	100
Total	359	100	

In Table 4.30, 235 (46%) of the respondents have expressed satisfaction with accessing their university's library website, but 88 (25%) of the respondents are neither satisfied nor dissatisfied when accessing library resources through their university library's website. In contrast, 36 or 10% of the respondents are not satisfied with accessing resources through their library website.

In Table 4.31, respondents were asked to mention the level of satisfaction with respect to available range of electronic resources.

Table 4. 31: Range of electronic resources (e.g. Web of Knowledge) used by respondents

Range of electronic resources (e.g. Web			Cumulative
of Knowledge)	Frequency	Percentage	Percentage
Very satisfied	88	24.51	24.51
Fairly satisfied	133	37.05	61.56
Neither satisfied nor dissatisfied	90	25.07	86.63
Fairly dissatisfied	28	7.8	94.43
Very dissatisfied	20	5.57	100
Total	359	100	

Source: Field data (2018).

In Table 4.31, 62% of the respondents are relatively satisfied with the range of electronic resources, such as the Web of Knowledge, in their library collection, although 25% of the respondents are neither satisfied nor dissatisfied with the range of electronic resources in the library. However, 48 (13%) of the respondents are dissatisfied with the range of electronic resources such as the Web of Knowledge in their library collection.

In Table 4.32, respondents were asked to mention the level of satisfaction with respect to adequacy of the library opening hours.

Table 4. 32: Adequacy of library opening hours to respondents

Opening hours	Frequency	Percentage	<b>Cumulative Percentage</b>
Very satisfied	165	44.72	44.72
Fairly satisfied	128	34.69	79.4
Neither satisfied nor dissatisfied	38	10.3	89.7
Fairly dissatisfied	16	4.34	94.04
Very dissatisfied	22	5.96	100
Total	369	100	

Source: Field data (2018).

In Table 4.32, a considerable number of the respondents (293 (80%)) express their satisfaction with the opening hours of their library while 38 (10%) of the respondents indicate that they are neither satisfied nor dissatisfied with their library opening hours. Contrastingly, only 38 (10%) of the respondents show dissatisfaction with their library opening hours.

In Table 4.33, respondents were asked to mention the level of satisfaction with respect to conduciveness of the library environment.

Table 4. 33: Conduciveness of the library environment (noise, heating, ambience, etc.) to respondents

Library environment (noise, heating, ambience, etc.)	Frequency	Percentage	Cumulative Percentage
Very satisfied	161	44.6	44.6
Fairly satisfied	123	34.07	78.67
Neither satisfied nor dissatisfied	36	9.97	88.64
Fairly dissatisfied	12	3.32	91.97
Very dissatisfied	29	8.03	100
Total	361	100	

The findings in Table 4.33 show that 284 (79%) of the respondent are satisfied with their library environment while 36 (10%) of the respondents indicate neither satisfaction nor dissatisfaction with their library environment. However, forty-one, or 11% of the respondents are dissatisfied with their library environment.

In Table 4.34, respondents were asked to mention the level of satisfaction with respect to the helpfulness of library staff in accessing library services

Table 4. 34: Helpfulness of the library staff to respondents

Helpfulness of the library staff	Frequency	Percentage	<b>Cumulative Percentage</b>
Very satisfied	141	38.32	38.32
Fairly satisfied	155	42.12	80.43
Neither satisfied nor dissatisfied	42	11.41	91.85
Fairly dissatisfied	14	3.8	95.65
Very dissatisfied	16	4.35	100
Total	368	100	

Source: Field data (2018).

Regarding how helpful the library staff are in locating library resources, Table 4.34 shows that 296 (80%) of the respondents are satisfied with getting help from library staff whereas 42 (11%) of the respondents indicate neither satisfaction nor dissatisfaction about the helpfulness

of their library staff. However, thirty, or 8% of the respondents indicate that they are dissatisfied with the help they got from their university librarians.

In Table 4.35, respondents were about their satisfaction with the expertise of the library staff.

Table 4. 35: Perception of the expertise of the library staff by respondents

Expertise of the library staff	Frequency	Percentage	<b>Cumulative Percentage</b>
Very satisfied	130	35.33	35.33
Fairly satisfied	161	43.75	79.08
Neither satisfied nor dissatisfied	53	14.4	93.48
Fairly dissatisfied	9	2.45	95.92
Very dissatisfied	15	4.08	100
Total	368	100	

Source: Field data (2018).

In this table, 291 (79%) of the respondents are satisfied with the expertise of their library staff while 53 (15%) of the respondents are neither satisfied nor dissatisfied with the level of expertise of their library staff. However, twenty-four, or 6% of the respondents are dissatisfied with the level of expertise possessed by their library staff.

*In Table 4.36, respondents were asked to rate their overall impression of the library service.* 

Table 4. 36: Overall impression of the library service by respondents

Overall the library provides a good			Cumulative
service	Frequency	Percentage	Percentage
Strongly agree	99	27.05	27.05
Slightly agree	202	55.19	82.24
Neither agree nor disagree	39	10.66	92.9
Slightly disagree	22	6.01	98.91
Strongly disagree	4	1.09	100
Total	366	100	

Source: Field data (2018).

Table 4.36 reveals that 301 (82%) of the respondents strongly agree that overall, the library provides a good service while 39 (11%) are neither agreed nor disagreed with the quality of overall services from their library. However, twenty-six, or 8% do not agree that the overall services they are getting from their library is good.

The next section presents the Kendall Tau b coefficient rank correlation analysis

Table 4. 37: Kendall's Tau b coefficient

	Level of study	Mode study	of	Institution attended	Age group	Gender	Branch of library used	Frequenc y of library visit	Frequenc y of library visit	Looked for library material on the shelves	Interactio n with library staff	Borrowin g of library materials	Used a computer in the library	Used the library catalogue	Made a reservatio n on the library system
Level of study	1														j
Mode of study	0.4141	1													
Institution attended	-0.2805	-0.9013		1											
Age group	0.2354	0.6044		-0.5993	1										
Gender	0.0963	0.1304		-0.0873	0.1545	1									
Branch of library used	0.2464	0.4275		-0.3887	0.3508	0.0748	1								
Frequency of library visit	0.1371	0.1728		-0.1585	0.1415	-0.0687	0.3176	1							
Frequency of access to library and information services	-0.0497	-0.001		-0.0723	0.0733	-0.002	0.0452	0.3458	1						
Looked for library material on the shelves	0.0547	-0.1992		0.1899	-0.1951	-0.0483	0.0104	0.0247	0.0678	1					
Interaction with library staff	0.0529	-0.0476		0.0079	0.0111	0.0102	0.0249	0.0277	0.1132	0.3554	1				
Borrowing of library materials	0.1369	0.1642		-0.1674	0.109	-0.0526	0.2219	0.1533	0.0583	0.3328	0.339	1			
Used a computer in the library	-0.0098	-0.263		0.2408	-0.1516	-0.0656	-0.0992	0.0193	0.1514	0.3138	0.3141	0.2202	1		

Used the	0.0788	-0.2147	0.1728	-0.1735	-0.0588	-0.0502	0.0806	0.1642	0.3444	0.3153	0.2359	0.3429	1	
library catalogue														
Made a reservation on the library system	0.0683	-0.178	0.1734	-0.1024	-0.0311	0.0046	0.1416	0.1498	0.4017	0.3574	0.2496	0.3819	0.5053	1
Renewed a loan on the library system	0.036	-0.1057	0.1059	-0.1126	-0.0633	0.0405	0.0861	0.0963	0.2788	0.2824	0.3511	0.3062	0.4128	0.4521
Used an electronic journal	-0.0238	-0.2886	0.2309	-0.1877	-0.0247	-0.1048	0.0456	0.1781	0.342	0.3379	0.213	0.4042	0.4984	0.4836
Used an electronic resource (e.g. Web of Knowledge)	0.0062	-0.2029	0.1703	-0.1198	-0.0528	0.0007	0.1407	0.1779	0.3476	0.3088	0.2524	0.4686	0.428	0.5056
Range of Books	0.1438	-0.1555	0.1599	-0.1828	-0.0141	-0.0271	0.0545	0.0788	0.3896	0.2978	0.2187	0.3119	0.3119	0.2951
Course related books and texts	0.0949	-0.0993	0.0766	-0.0811	0.0008	0.0428	0.0643	0.0825	0.3774	0.2931	0.212	0.282	0.236	0.3091
Range of e- books	0.0194	-0.3371	0.3051	-0.1967	0.0284	-0.1041	0.0699	0.1366	0.2994	0.2707	0.1279	0.3047	0.3823	0.3692
Range of print journals	0.021	-0.2675	0.2307	-0.1734	-0.0452	-0.091	0.0361	0.0725	0.2965	0.2817	0.1865	0.3156	0.3851	0.3627
Range of electronic journals	-0.0032	-0.2868	0.2404	-0.2156	-0.0481	-0.1241	0.0619	0.1314	0.3259	0.255	0.1567	0.3809	0.4058	0.3541
Photocopyin g	0.1019	0.084	-0.094	0.1153	-0.0776	0.0936	0.0919	0.0451	0.1806	0.1956	0.2574	0.2036	0.2277	0.2207
Printing	0.1459	0.1239	-0.1032	0.123	0.0361	0.1329	0.0794	0.0351	0.2126	0.2181	0.2568	0.2674	0.2662	0.297
Study facilities (study desk, etc.)	0.1213	0.0585	-0.069	0.0371	0.0029	0.082	0.113	0.0531	0.2416	0.1726	0.2264	0.2127	0.2309	0.2751
Provision of computers	0.058	-0.232	0.2234	-0.1223	0.0525	-0.0708	0.0519	0.1109	0.2262	0.2046	0.1534	0.3767	0.3133	0.3267
Reliability of computers	0.007	-0.2951	0.2663	-0.1673	0.0295	-0.0927	0.0353	0.1021	0.2258	0.2279	0.1648	0.4116	0.3091	0.3501

Library catalogue	0.0181	-0.1983	0.1915	-0.1723	-0.062	-0.0496	0.0639	0.0665	0.2263	0.2253	0.2016	0.2901	0.4676	0.3104
Library website (other than library catalogue)	0.0536	-0.1767	0.1749	-0.1547	-0.0195	-0.0333	0.0535	0.0684	0.2448	0.2043	0.2204	0.36	0.3847	0.356
Range of electronic resources (e.g. Web of Knowledge)	0.0313	-0.2116	0.1847	-0.1365	-0.0484	-0.0688	0.0518	0.1418	0.2228	0.1951	0.1205	0.386	0.3699	0.3151
Opening hours	0.129	0.0509	-0.0545	-0.0007	-0.0324	0.138	0.1108	0.0115	0.2525	0.1475	0.2426	0.2162	0.2997	0.2184
Library environment (noise, heating, ambience, etc.)	0.0985	0.0457	-0.041	0.0251	-0.0188	0.135	0.1482	0.1239	0.2391	0.2339	0.1823	0.2049	0.2008	0.2232
Helpfulness of the library staff	0.0747	-0.0196	0.0078	-0.0217	-0.0795	0.0221	0.1065	0.0923	0.1756	0.3417	0.2959	0.2503	0.2718	0.2709
Expertise of the library staff	0.0476	-0.0491	0.0425	-0.1025	-0.0323	0.0683	0.1174	0.0614	0.2321	0.286	0.2638	0.2346	0.3392	0.3005
Overall the library provides a good service to me	0.0884	0.0691	-0.0968	0.0309	-0.0087	0.1263	0.1396	0.0788	0.3199	0.2424	0.2648	0.1851	0.2344	0.2432
	Renewed a loan on the library system	Used an electronic journal	Used an electronic resource (e.g. Web of Knowledge	Range of Books	Course related books and texts	Range of e-books	Range of print journals	Range of electronic journals	Photocopyin g	Printing	Study facilities (study desk, etc.)	Provision of computer s	Reliabilit y of computer s	Library catalogue
Renewed a loan on the library system	1													

		1 .	1	1										
Used an	0.4416	1												
electronic														
journal														
Used an electronic	0.4153	0.6027	1											
resource (e.g.														
Web of														
Knowledge)														
Range of Books	0.2043	0.2732	0.2934	1										
Course	0.1772	0.224	0.3045	0.5677	1									
related books														
and texts														
Range of e-	0.3097	0.4456	0.3521	0.3681	0.3699	1								
books														
Range of print journals	0.3103	0.4047	0.3675	0.3641	0.4118	0.5755	1							
Range of	0.2774	0.5049	0.3959	0.3282	0.3017	0.5897	0.6134	1						
electronic														
journals														
Photocopyin	0.219	0.1797	0.2277	0.2192	0.2093	0.1485	0.2689	0.2331	1					
g														
Printing	0.2548	0.2118	0.2551	0.1818	0.1901	0.1539	0.2389	0.2527	0.7242	1				
Study	0.1666	0.1711	0.2498	0.2907	0.2958	0.1623	0.1956	0.1244	0.395	0.3787	1			
facilities														
(study desk,														
etc.)														
Provision of	0.2673	0.4011	0.3651	0.2831	0.238	0.4292	0.3643	0.4527	0.2587	0.2758	0.3103	1		
computers														
Reliability of	0.2598	0.3897	0.395	0.3388	0.2677	0.4247	0.4138	0.4178	0.1927	0.1784	0.2326	0.671	1	
computers														
Library	0.3035	0.3808	0.3378	0.3049	0.2847	0.4297	0.4492	0.4579	0.2856	0.284	0.2634	0.4755	0.4897	1
catalogue														
Library	0.3237	0.3732	0.3865	0.3192	0.32	0.4242	0.3919	0.3694	0.2363	0.2644	0.2471	0.4741	0.4923	0.5169
website														
(other than														
library														
catalogue)														
Range of	0.2799	0.4134	0.4061	0.3004	0.2423	0.4475	0.4491	0.4642	0.1795	0.2216	0.2087	0.429	0.4636	0.4962
electronic														
resources														

	1		1	1	Ī	П	1	1	1	1		1	1	T
(e.g. Web of Knowledge)														
Opening hours	0.2099	0.1964	0.258	0.2163	0.2181	0.1805	0.1953	0.2119	0.2508	0.2763	0.2873	0.2491	0.2471	0.2821
Library environment (noise, heating, ambience,	0.1741	0.1807	0.3019	0.3069	0.3069	0.2746	0.2743	0.1719	0.2559	0.2612	0.2788	0.2275	0.2253	0.241
etc.) Helpfulness of the library staff	0.2809	0.2733	0.2859	0.3548	0.2995	0.2575	0.3388	0.2556	0.3573	0.3567	0.3037	0.2973	0.3237	0.3453
Expertise of the library staff	0.2888	0.2528	0.3086	0.3356	0.3202	0.2914	0.308	0.2445	0.2647	0.3163	0.2673	0.2613	0.3086	0.3603
Overall the library provides a good service to me	0.1973	0.1765	0.2642	0.3761	0.3356	0.2145	0.2362	0.2117	0.2566	0.2828	0.2778	0.1528	0.2548	0.2882
	Library website (other than library catalogue	Range of electronic resources (e.g. Web of Knowledge	Opening hours	Library environmen t (noise, heating, ambience, etc.)	Helpfulnes s of the library staff	Expertis e of the library staff	Overall the library							
Library website (other than library catalogue)	1													
Range of electronic resources (e.g. Web of Knowledge)	0.5753	1												
Opening hours	0.2875	0.3406	1											
Library environment (noise,	0.2703	0.3298	0.3643	1										

heating, ambience, etc.)											
Interaction with library staff	0.337	0.3551	0.3223	0.5033	1						
Expertise of the library staff	0.3439	0.3572	0.3839	0.4169	0.6286	1					
Overall the library provides a good service to me	0.2739	0.2499	0.3549	0.3894	0.3617	0.3455	1				

obs=330. \* Significant findings are highlighted in the table.

### 4.4 Discussion of correlations

The Kendall's Tau-b coefficient findings in Table 4.37 provides analysis of the correlation between differing independent variables used in the study. These comparisons are necessary to determine a linkage between some of the variables that influence universities' accounting students from both types of institutions to patronise library services or otherwise. In the finding in Table 4.37, the key variables that influence accounting students to patronise library services or discourage their use of library services are explained. Based on a positive or negative correlation of -1 and +1 a correlation that is  $\geq \pm 0.5$  strongly influences the students' decision either to patronise or deter them from using library services. The study tests for the null hypothesis that Tau-b =0, meaning that the variables are uncorrelated at 0.05 significance level. The alternative hypothesis is that the variables are correlated, and  $\tau$  is non-zero.

According to Barrowman (2014), there is often the confusion to assume that an association between two variables means a possible causal relationship. Barrowman (2014) argues that the "fundamental problem of causal inference" is that though it is impossible to estimate an individual variable's causal effect, there is the likelihood under certain assumptions to assume the average causal effect of several variables. Additionally, a significant correlation may occur because there is a relationship of unrelated factors but which does not necessarily imply that such outcome is due to statistical behaviour (Barrowman, 2014). Moreover, it is possible that two variables are statistically correlated with no cause-and-effect relationship probably because they have a common cause. Consequently, the existence of a correlation does not indicate a causal relationship; and the existence of a causal relationship does not usually signify a correlation (Barrowman, 2014). As such, whether there is a causal relationship between two

variables, the cause and its effect still need to be identified. Hence, researchers need to subject claims of causal relationships to scrutiny to debunk those claims that do not hold up.

The findings show that there is a negative correlation between the type of institution and mode of study at -0.9013. This suggests that the type of institution (contact versus distance-learning) does not necessarily influence student library patronage. At -90% correlation, it appears that there is a near perfect negative correlation between institution attended and mode of study, suggesting that the latter has nothing to do with whether accounting students use library resources. However, findings show a strong but positive correlation between age group and mode of study at 0.6044. This correlation indicates that age plays a significant and positive influence on library patronage. From the responses and despite the mode of study, accounting students below the age of 40 are more likely to use library services. This may be because of their proximity to the physical library and because the majority within this age group are undergraduates who need to complete their tasks by consulting library sources. The finding indicates that there is a negative correlation (-0.5993) between age group and institution attended. This indicates that a moderate negative association exist between students' age group and institution attended. This means that age is not significantly associated with the type of institution attended by the respondents.

Moreover, the finding in Table 4.37 indicate a strong positive correlation between making a reservation on the library system and use of an electronic resource. It indicates that, at 0.5056, there is a positive correlation between use of an electronic resource and making a reservation on the library system. There is a moderate positive correlation of 0.5053 between making a reservation on the library system and using the library catalogue to locate library resources. This indicates that library proximity has an influence on students making a reservation on the

library system and using the library catalogue to locate library resources. Respondents from the distance learning institution indicate that they sometimes receive email verification upon making a reservation that the use of electronic resource assists them to make library reservations. In comparison, the students from the contact university are used to making a walk-in reservation.

The finding shows that, at 0.6027 (60%), use of the electronic resources has a strong positive correlation with the mode of study suggesting that there may be a strong relationship between use of electronic resources and mode of study. It explains how the usage of electronic resources by accounting students from both institutions is not significantly different. Both full-time (University of Limpopo) and distance learning (University of South Africa) students agree that they have been patronising libraries outside their institutions while some of the respondent's assert that they do not understand how to search for information electronically.

In addition, findings in Table 4.37 indicate that there is a positive correlation between use of the electronic journal and electronic resource at 0.4984 which is 50%. It revealed that most accounting students are using electronic sources such as databases to facilitate free access to find information. It suggests that accounting students who use electronic journals are likely to use databases in their quest for information compared to that of print.

Findings reveal that, with a correlation of 0.5753, there is a positive correlation between the range of electronic resources and library catalogue. This shows that there is a link between respondents' visiting the library to make use of an available range of electronic resources and accessing materials through the library catalogue. This indicates that the use of the library catalogue is a common approach for accounting students: to search for books on the library

shelves since the library catalogue is arranged alphabetically and leads to better access to library collections. Respondents' ability to access the range of electronic resources show that they understand the range of e-resources to meet their information needs. Hence, they are likely to patronise the library more because of their familiarity with this library service. It shows that library catalogue (information which is available electronically) makes it easier for respondents to search the information they need. Nevertheless, this explains that accounting students are making use of both the library catalogue to search for hard copy materials and electronic resources to access journal articles in both type of study modes. Also, students from both study modes patronises the library to access and use library electronic databases and other electronic resources (information which is available electronically).

A correlation of 0.5677 (57%) indicates a positive correlation between use of course related textbooks and age group. Evidently, accounting students need more textbooks in the library because most of their textbooks are prescribed for each course. It shows that there is need for library staff to ensure the availability of prescribed textbooks for accounting students in the library to encourage their patronage of the library.

With a correlation of 0.5755, the finding shows that the type of library resources used is positively aligned to print journals. It revealed that respondents use their electronic devices to study and search for information. This study explains how respondents believe that print is increasingly giving way to the electronic form of materials. If librarians could influence the online journals and make sure there is quality for convenience when selecting journal articles this will encourage accounting students to patronise the library more. Respondents, especially those on postgraduate research from both institutions reveal that they prefer the use of electronic journals to print journals because it is easily accessible.

There is a positive correlation between mode of study and range of electronic journal of 0.5049. This shows that the mode and possibly level of study (undergraduate or postgraduate) clearly has an influence of how students access range of electronic journals available in the library. One advantage of electronic resources is their ability to be used by multiple users at a time and the other is that they can be accessed remotely that there is no need of having physical visits to the library especially by the distant learning students.

The study revealed that with 0.5897 there is a positive correlation between the electronic journal and e-book usage. Respondents indicated that they visited the library to access different resources such as course related textbooks. Some visit the library to make use of electronic materials while others visit to borrow printed materials. It appears that respondents make use of both electronic journal and e-book usage because both type of institutions kept an array of e-resources.

It is observed that with 0.6134 there is a positive correlation between using the electronic journal resources and print journals. This study explains how respondents often visit the library because of the electronic journal and print journal; respondents believe library needs to make sure there are enough computers, sufficient journal subscriptions, software and other online material that could help respondents to visit the library more.

It is indicated that with 0.7242 there is a significant positive correlation between use of printing and photocopying. This finding suggests that there may be a link between respondents visiting the library for printing and photocopying services. Additionally, this may be an indication that respondents are happy with the library printing photocopying services. It is necessary for the

library to purchase more photocopying machines to reduce queues when respondents access this service to encourage more library patronage.

There is a positive correlation of 0.5169 between uses of the library website and library catalogue. This means that there may be a link between having to gain access to the library website by physically visiting the library and using library catalogues to access other resources. It may imply that by checking the availability of materials through the library website, accounting students could have resorted to using the library catalogue to access hard copies for convenience. Some of the accounting students note that they sometimes visit the library to access resources through the library websites by using the computer facilities because they believe that it affords them easier access that when they use their electronic devices to access library services through the library websites from their residences. Moreover, accounting students state that they make use of the library catalogue when searching for recommended texts or their assignments. Some of the accounting students assert that they sometimes renew library materials they have in their possession to have continued use to complete their task (though renewal is limited to only once). Others state that they use the library catalogue to request for new items after checking for availability through the library website.

Additionally, finding shows a positive correlation of 0.5033 between accounting students' interaction with library staff and having a conducive library environment. Some of the respondents explained that they found their interaction with library staff helpful when they encounter challenges accessing some library services. It shows that library staff make up time to ensure a pleasant library experience for their patrons.

Moreover, there is a 0.6286 positive correlation between the expertise and experience of library staff and interaction with library staff. This means that in interacting with the students, expertise and experience is a valuable quality to ensure patrons' satisfaction when resolving their challenges. Hence, it is plausible that library staff need to improve individual skills in different managerial skills to ensure sustained and continued patronage of accounting students in universities.

#### 4.5. Discussions

The finding of this study indicate that there are many factors that influence accounting students of universities in a contact and open distance learning mode to patronise library services. Findings provide a better understanding of the factors that motivate accounting students of universities to continue to use library services. Additionally, the finding provide practical implications as to how to motivate accounting students of universities to patronise library sources in a consistent manner, based on the ECT framework.

# 4.5.1. Implications for the study

The study used the ECT framework to understand what influences accounting students of universities to consistently use library resources. The ECT framework posits that patronage demands the fulfilment of prior expectation by the provider of services. This means that before any interaction between parties, there is an expectation. Fulfilling the expectation of the patron derives from the Expectation-Confirmation Theory (ECT), which explains that patrons' satisfaction is linked to continuance intention since satisfaction is a prerequisite to establishing patron loyalty and continuance usage intention (Shankar *et al.*, 2003; Hossain & Quaddus, 2012). The following factors are found to have influenced accounting students of universities

to consistently use library resources: accessibility (type of institution attended); resource quality (availability of a wide range of electronic resources [journals, books etc.]); usability (age of students, library website, availability and reliability of computers); satisfaction (interactions and expertise of the library staff).

Research Objective 1: To investigate the reasons for low level of library patronage among accounting students in South African Universities

Type of institution attended

In this study, findings show that students from the contact institution patronise the library more often than open distance learning, an indication that beyond the ECT factors listed by other researchers, the type of institution attended by the student can influence library usage. The finding indicates that accounting students in the contact learning institution patronise library services more than those in the open distance learning institution because of the proximity to their residence. Students from the contact university live on campus and are closer to library facilities than student in an open distance learning institution with no campus accommodation.

Usability

According to Jiang and Klein (2009), the ECT framework posits that satisfaction is determined by interplay between prior expectations and perception of its delivery. As such, when patrons complain about their inability to use a library resource effectively, their pre-conceived expectation is not met and they are dissatisfied. In this study, respondents are concerned about the difficulty in locating resources in the library and this is supported by the findings of Catalano (2013). They believe that locating library materials should be made easy through

well-organised shelves. This assertion is credited with most of the accounting students from the contact institution. Respondents agreed that materials on the shelves should be well-organised to save the time of users. Respondents also believe that the use of library resources in locating electronic resources is often difficult for them. This view is agreeing with that of Adeniran (2011). This is an indication of dissatisfaction by the patrons with the type of services received from their libraries, as suggested by the ECT. The respondents requested that librarians should create more opportunities for students to connect and encourage peer support within the library environment. On this Aabø and Audunson (2012) agreed that library staff need to introduce a better environment and availability of valuable collections that will enable the student to patronise the library more.

Research Objective 2: To determine what features would make the use of a library for locating information that is relevant and attractive to university accounting students in a contact and a distance learning institution in South Africa

## Resource quality

Most of the students from the contact learning institution assert that their library has insufficient new materials and resources relevant to their course of study and that the library is deficient in the latest electronic sources. In support of these findings, Verma and Parang (2015) state that libraries need to make an effort to improve their collections in every aspect to enhance student patronage. Therefore, the library staff should strive to enhance all the services in the library to satisfy user's information needs and their quest to find relevant information. If the library can make available relevant textbooks and prescribed textbooks for the use of the library at any time of the day, including weekends, patronage among universities accounting students in both

institutions may increase. Similarly, Goodall and Pattern (2011) explain that patrons' satisfaction is directly related to the quality of service. Again, the expectation confirmation theory (ECT) states that when patrons' expectations are not meant, they show their dissatisfaction by not reusing the services of the provider.

## Accessibility

The respondents say they will use the library services more if they can do their homework, access information without difficulty, use the internet at any time and be able to search for relevant textbooks. This is supported by the findings of Katz (2013). However, the findings of the current research indicate that accounting students from the contact learning institution have limited access to internet use because of the small number of access points available. They complained that their library is stocked with old and expired textbooks which do not allow them to complete their assignments. This is supported in the view of Catalano (2013). This contradicts the expectation confirmation theory (ECT) that patrons derive satisfaction when services received meet, or are above, expectation. It is plausible therefore for librarians to ensure that relevant, up-to-date materials are available on library shelves and electronically to motivate these sets of accounting students to patronise library services. Understanding the particular information needs of patrons is crucial to providing excellent resources, a view expressed by Nesba (2014).

Respondents in both institutions state that the library should adjust the opening and closing hours of library services. The students hoped that if the library can open for 24 hours a day, students can go to the library to study at any time to wish. Findings revealed that the closing hour and the location of the library do not significantly affect the use of the library in

institutions. Furthermore, respondents indicated that if the library could update its closing hours and the resources in the library students will know that anytime they are visiting the library the probability is high that all their needs will be met as, supported by the findings of Kavulya (2003). Respondents commented that library staff response rate to students needs to be constantly monitored to assist the library management to put in place services and solutions to encourage increased students' patronage to the library. This observation is like those of Iyoro *et al.* (2012) and agrees with the ECT, suggesting that patrons will voice their dissatisfaction when services failed to meet their expectations. Findings indicate that female accounting students made greater use of library services than male students.

Research Objective 3: To investigate any improvements to library service can be made to make the use of the library of significant importance

Findings reveal that most accounting students patronise the library to read the latest newspaper publications, to use online facilities for social media purposes. This finding is supported by the conclusion of Jeong (2012). Respondents believe that online accounting textbooks should be made more easily accessible to the respondents and other information resources in the library. Moreover, respondents expect the library to showcase its various electronic databases through periodic seminars to afford accounting students the opportunity to familiarise themselves with relevant subject-related resources for improved patronage. There is an indication by respondents that the library website should constantly be update for its online collections to encourage accounting students to patronise the library more.

# 4.6. Summary of the chapter

The chapter explained and discussed the findings of the data sourced from participants. A detailed explanation of the findings of the questionnaire that was analysed using the Kendall's' Tau-b coefficient run on Stata. The analysis was based on the non-parametric statistical method (Kendall's Tau-b coefficient) that measures the correlation of agreement among the various study variables. The chapter presented the survey's descriptive statistics. The Kendall's Tau-b coefficient findings in Table 4.37 provides analysis of the correlation between differing independent variables used in the study. These comparisons helped to determine a linkage between some of the variables that influence universities' accounting students from both types of institutions to patronise library services or otherwise.

# CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

## 5.1. Introduction

Chapter Four presented the findings of the study, and the data has been analysed and interpreted. This chapter provides an overview of the study. The next sections present a summary of the study, major findings, the contribution of the study, conclusion, research and recommendations.

# 5.2. Summary

The purpose of this study was to determine the current level of library patronage among accounting students both in a distance and contact learning institutions (UNISA and UL). The study assumes that accounting students, like any other students, need to visit the library frequently to use available resources. In accomplishing the goal of the study, the study set out to achieve some predetermined objectives at the outset. First, to assess the current level of patronage among university accounting students in a contact and a distance learning institution in South Africa. Secondly, to determine what features would make the use of a library for locating information relevant and attractive to university accounting students in a contact and a distance learning institution in South Africa. Lastly, to investigate what improvements should be made to encourage university accounting students to patronise library services.

In achieving these objectives, the researcher reviewed the extant literature to assess the current pattern of library patronage among university students and to determine those variables or factors that encourage university accounting students to use library services. The study reviewed the literature on those special features that attract university students to use library

resources. It is essential to review this literature to enable the researcher to understand the critical factors that motivate library patronage among university students. Chapter Two reviewed extant literature on the Expectation Confirmation Theory (ECT), the level, features and satisfaction of patrons patronising the academic library. Essentially, discussions about the role of the library in student academic success, the diversity of sources and patrons' satisfaction, the motivation of patrons through technology such as Web 2.0 and social networking like Facebook and Twitter were presented. The influence of library planning on patronage was also discussed. This chapter concludes with a summary. Chapter Three outlines the research procedure used for the study. The research design, method, population and derivation of the sample was explained. The chapter discussed the questionnaire as the data collection instrument and addressed ethical clearance issues. Data were collected using questionnaires. The data analysis method, the Kendall's Rank Correlation was defined and discussed. Collected data were statistically analysed and interpreted using the Kendall Tau-b. Findings of the study help to determine what variables attract university accounting students to patronise library resources in both institutions. The library needs the services and its resources to be fully utilised. In doing this, it will increase how accounting students visit the library. The study adopted the ECT to confirm the reasons for patrons' satisfaction or dissatisfaction with the level of library services received at both institutions. Also, the study discussed the ECT argument that patrons' decision to frequently use a service (in this study, library services) is mainly determined by the satisfaction with prior services received. Chapter Four explained and discussed the findings of the data sourced from participants. A detailed explanation of the findings of the questionnaire that was analysed using the Stata's Kendall's' Tau-b coefficient was provided. The analysis was based on a non-parametric statistical method (Kendall's Taub coefficient) that measures the correlation of agreement among the various study variables.

The chapter presented the survey's descriptive statistics. The Kendall's Tau-b coefficient findings in Table 4.37 provides analysis of the correlation between differing independent variables used in the study. These comparisons helped to determine a linkage between some of the variables that influence university accounting students from both types of institutions to patronise library services or otherwise.

# 5.3. Major findings

Findings of the study indicate that certain library features attract accounting students to patronise library resources. In satisfying their information needs university accounting students used both the physical library though at a low rate and the internet although internet usage was more than the library. It shows that the internet continues to be an important component of library services in today and tomorrow's library. Most of the respondents indicated that they used the internet daily but not necessarily for academic work because most materials used by accounting students in both institutions were from readings recommended by academic staff. Moreover, it seems that accounting lecturers do not refer undergraduate students, except the more senior students at postgraduate levels who typically engage in academic research, to make use of library resources for their assignments and other academic work.

From the findings of this study, it is evident that library staff are facing a challenge on how to help accounting students find relevant academic materials because most of the core accounting courses are based on legislative materials especially in taxation, financial accounting and auditing sub-disciplines. These materials are often provided directly to the students. At UNISA, materials are charged to student fees including accounting students. Hence, there was no motivation to patronise either the physical or electronic library, which is likely to be an

expression of dissatisfaction according to ECT. Findings reveal the lack of awareness among accounting students from both institutions about getting access to library information. Although students were taken through library orientation in their first year at university, many accounting students admit that they have not visited the library since then.

For both types of institutions, the mode of study has no influence on library patronage. However, the finding indicates that accounting students below the age of 30 years are often attracted to the library especially the use of electronic resources. Most of the accounting students from both institutions indicate that they are unfamiliar with the use of electronic sources to search for information. Some of the students say that they use their electronic devices to access information but often face the challenge of inaccessibility because of networks and connection problems to the main online facility of their university library. Another major finding is that most accounting students agree that interacting with courteous librarians is the reason they like to patronise the physical library. They believe that the friendliness of the subject librarians is enough motivation to seek their help to find library resources.

The findings indicate that accounting students from neither institution are interested in the use of the library catalogue because their focus is more on the recommended textbooks which are often supplied to them after payment of tuition fees. It is even difficult for some accounting students (those whose bursaries and scholarships does not cover books) to access a hard copy from the library because of inadequate provision of such textbooks. The printing and photocopying services provided by both institutions are a significant influence for library patronage by accounting students as indicated in the findings. This should not be the main motivating factor because the pride of librarians is the quality of responses to requests made by patrons that define the quality of services they render. The expertise of library staff in

addressing their information needs is believed to be crucial to patronising library services. As such, library staff also need to update and buy more material for the library especially the prescribed textbooks. The finding reveals how it is necessary for library staff to train accounting students on how to search information easily and to know the current information to use and relevant ones for this will make the accounting student prefer the library rather than the internet. Findings also indicate that some of the challenges encountered by university accounting students in accessing library services relate to library hours which need to be extended to accommodate all patrons.

#### **5.3.** Contribution

This study contributes to literature through findings that reveal that accounting students in both institutions find it difficult to patronise library services because most of their learning materials in both hard and electronic copies are recommended and supplied to them as part of their tuition benefit. The apathy displayed towards patronage of library services among university accounting students in South Africa is because their lecturers seldom give assignments or tasks that require the students to search for information beyond the recommended textbooks. However, beyond the honours level, accounting students are by the nature of their study (masters and doctoral) compelled to patronise library sources for their study.

## 5.4. Conclusion

The study examined the factors that influence accounting students of universities to patronise library resources, based on the ECT framework that posits type of institution attended, resource quality, accessibility, usability and satisfaction as significant factors. Findings indicate that the most significant factor that influences accounting students of universities to patronise library

resources are the expertise and interaction of the library staff. This is supported by the ECT framework which posits that patrons will continue to use library services only if their perceived perception of the usefulness of the services are satisfied. In this case, accounting students from both institutions examined in this study confirm the ECT framework of satisfaction being based on perception of the library services they receive.

Findings of the study confirm that accounting students are not motivated to use and patronise library resources and services because of their inability to access current course-related materials through library sources. As such, the study deduces that library resources and services are not being fully utilised by university accounting students, especially in South Africa. It is important for accounting students to familiarise themselves with the array of library resources available to them. The different types of institutions need to understand the information needs of their students (especially accounting students) before attempting to address them. The kind of institution does not have any influence on library patronage as most of them are either motivated or discouraged from patronising the library by similar factors. The variables that motivate accounting students' patronage of library services include the availability of alternative discipline-related materials (electronic and paper), expertise and friendliness of librarians, and the push by course lecturers through assignments, and availability of recommended and alternative materials. Most accounting students admit they have never visited the library because there is no reason for them to visit. They claim they have all the materials they need to be successful in each course. It is plausible that the type of discipline, in this instance accounting, as a specialised discipline and the approach used for teaching does not encourage the use of library resources beyond the recommended textbooks. However, findings indicate that accounting students at masters and doctoral levels use library resources

in a more obvious way because of their research activities than students below the masters' level. This study concludes that there is no difference between accounting students in either institution regarding the variables that motivate or discourages them from patronising the library. Overall, there is an indication that the library services received by accounting students from both institutions fail to meet patrons' expectation as theorised by the ECT: patrons are dissatisfied.

## 5.5. Recommendations

In motivating accounting students to patronise library services, accounting lecturers need to constantly refer and engage undergraduate and postgraduate students in making use of library resources for their assignments and other academic work. Despite the fact that students were taken through library orientation in their first year at university, the study suggests the need for a continued sensitisation about available resources to university accounting students to encourage increased patronage. Although an average number of accounting students agree that interacting with courteous librarians is the reason they like to patronise the physical library. Subject librarians should endeavour to make the library experience with these university accounting students friendlier whenever they come seeking their help to find library resources for improved patronage. Since accounting students from both institutions are provided with hard copies of recommended accounting textbooks once their tuition fees are paid, library staff should update their library collections with both online and hard copies of alternatives beyond the recommended textbooks.

# **5.5.1. Further study**

Further study is encouraged on library patronage of university accounting students that will include all South African universities offering accounting programme in a sample size large enough for a more robust finding.

# **Bibliography**

Aabø, S and Audunson, R. 2012. Use of library space and the library as place. *Library & Information Science Research* 34(2):138-149.

Abok, V.A. and Kwanya, T., 2016. Maximising the potential of social media to deliver academic library services to students: a case study of The Technical University of Kenya Library. *Inkanyiso: Journal of Humanities and Social Sciences*, 8(2), pp.147-155.

Abubakar, D and Adetimirin, A. 2015. Influence on research literacy' on postgraduate use of e-resources in Nigeria university libraries. *Library Philosophy & Practice* 5(2):1-17.

Adeniran, P. 2011. User satisfaction with academic libraries services: Academic staff and students' perspectives. *International Journal of Library and Information Science* 3(10):209-216.

Aderibigbe, N and Ajiboye, B. 2013. User education program as determinant of electronic information resources usage in Nimbe Adedipe University Library, Nigeria. *The Electronic Library* 31(2):244-255.

Aderibigbe, N and Emmanuel, S. 2012. Use of library information technology resources by graduate students of University of Agriculture, Abeokuta. *Library Philosophy & Practice* 10(1):1-10.

Adikata, A and Anwar, M. 2006. Student library use: a study of faculty perceptions in a Malaysian university. *Library Review* 55(2):106-119.

Aharony, N. 2012a. An analysis of American academic libraries' websites: 2000-2010. *The Electronic Library* 30(6):764-776.

Aharony, N. 2012b. Facebook use in libraries: an exploratory analysis. *Aslib Proceedings* 64(4):358-372.

Ahmad, P and Brogan, M. 2012. Scholarly use of e-books in a virtual academic environment: A case study. *Australian Academic & Research Libraries* 43(3):189-213.

Ajagbe, AM, Eluwa, SE, Duncan, EE, Binramliy, MK and Long, CS. 2011. The use of global system of mobile communication (GSM) among university students in Malaysia. *International Journal of Innovation, Management and Technology* 2(6):512.

Al-Daihani, S and AlAwadhi, S. 2015. Exploring academic libraries' use of Twitter: a content analysis. *The Electronic Library* 33(6):1002-1015.

Alma, MA, Groothoff, JW, Melis-Dankers, BJ, Suurmeijer, TP and van der Mei, SF. 2013. The effectiveness of a multi-disciplinary group rehabilitation program on the psychosocial functioning of elderly people who are visually impaired. *Journal of Visual Impairment & Blindness* 107(1):5-16.

Al-Maskari, A and Sanderson, M. 2010. A review of factors influencing user satisfaction in information retrieval. *Journal of the American Society for Information Science and Technology* 61(5):859-868.

Anafo, P and Filson, C. 2014. Promoting information literacy among undergraduate students of Ashesi University College. *Library Philosophy and Practice (e-journal) Paper 1033*.

Anderson, K and May, F. 2010. Does the method of instruction matter? An experimental examination of information literacy instruction in the online, blended, and face-to-face classrooms. *The Journal of Academic Librarianship* 36(6):495-500.

Angell, K. 2013. Open source assessment of academic library patron satisfaction. *Reference Services Review* 41(4):593-604.

Ayu, A and Abrizah, A. 2011. Do you Facebook? Usage and applications of Facebook page among academic libraries in Malaysia. *The International Information & Library Review* 43(4):239-249.

Babbie, E.R. 2016. The practice of social research. 14th ed. Boston, MA: South-Western.

Baby, K and Kumaravel, J. 2011. Literature searching pattern of the Faculty of Sri Sarada College for Women: A study. *International Journal of Library and Information Science* 3(11):224-229.

Baidwan, K, Bala, A, Chadha, N and Kumari, M. 2011. Usage of Wi-Fi service among users of the Postgraduate Institute of Medical Education and Research Library, Chandigarh. DESIDOC Journal of Library & Information Technology 31(3):175-178.

Barrowman, N. 2014. Correlation, causation, and confusion. *The New Atlantis: A Journal of Technology & Society* Summer/Fall: 23-44.

Bartlett, J and Toms, E.G. 2005. How is information used? Applying task analysis to understanding information use. *Proceedings of the Annual Conference of Canadian* 

Association for Information Science (CAIS), Ottawa, 3-5 June. Available: http://cais-acsi.ca/ojs/index.php/cais/article/view/159/653 (Accessed 8 July 2015).

Bhattacherjee, A. 2001. Understanding information systems continuance: an expectation-confirmation model. *MIS quarterly* 351-370.

Bhatti, R, Batool, F and Malik, S. 2013. Pervasiveness and purposes of library usage by LIS students at the Islamia University of Bahawalpur. *Library Philosophy & Practice (e-journal)* Paper 940.

Bhatti, R, Tariq, M and Salman, B. 2014. Study of factors affecting library usage frequency by students in university libraries of developing countries including Pakistan. *Pakistan Library & Information Science Journal* 45(1):9-17.

Blackburn, H. 2011. Millennials and the adoption of new technologies in libraries through the diffusion of innovations process. *Library Hi Tech* 29(4):663-677.

Brodsky, M. 2017. Understanding Data Literacy Requirements for Assignments: A Business School Syllabus Study. *International Journal of Librarianship*, 2(1): 3-15.

Brown, S.A., Venkatesh, V. and Goyal, S., 2014. Expectation confirmation in information systems research: a test of six competing models. *MIS Quarterly* 38(3):729-756.

Buckland, MK. 2014. Library services in theory and context. Berkeley, California: Pergamon.

Burhanna, K, Seeholzer, J and Salem, J. 2009. No natives here: a focus group study of student perceptions of Web 2.0 and the academic library. *The Journal of Academic Librarianship* 35(6):523-532.

Case, DO. 2008. Looking for information: A survey of research on information seeking, needs, and behaviour. 2nd ed. Bingley, UK: Emerald.

Cassidy, ED, Britsch, J, Griffin, G, Manolovitz, T, Shen, L and Turney, L. 2011. Higher education and emerging technologies: student usage, preferences, and lessons for library services. *Reference & User Services Quarterly* 50(4):380-391.

Catalano, A. 2013. Patterns of graduate students' information seeking behaviour: a metasynthesis of the literature. *Journal of Documentation* 69(2):243-274.

Chakravarty, R and Chopra, K. 2013. Application of web 2.0 tools in IIT (Indian Institute of Technology) & IIM (Indian Institute of Management) libraries of India: a study. *SRELS Journal of Information Management* 50(1):35-40.

Chan, D and Wong, G. 2013. If you build it, they will come: An intra-institutional user engagement process in the learning commons. *New Library World* 114(1/2):44-53.

Chandra Mohan Kumar, C and Dominic, J. 2012. Users satisfaction in library services in Nehru Institute of Engineering and Technology (NIET) at Coimbatore: a study. *i-Manager's Journal on Information Technology* 1(3):20-24.

Charnigo, L and Barnett-Ellis, P. 2013. Checking out Facebook.com: the impact of a digital trend on academic libraries. *Information Technology and Libraries* 26(1):23-34.

Cheng, YM. 2014. Why do users intend to continue using the digital library? An integrated perspective. *Aslib Journal of Information Management* 66(6):640-662.

Chow, A and Croxton, R., 2012. Information-seeking behaviour and reference medium preferences. *Reference & User Services Quarterly* 51(3):246-262.

Choy, F. 2011. From library stacks to library-in-a-pocket: will users be around? *Library Management* 32(1/2):62-72.

Chu, SKW and Du, HS. 2013. Social networking tools for academic libraries. *Journal of Librarianship and Information Science* 45(1):64-75.

Cohen, L, Manion, L and Morrison, K. 2013. *Research methods in education*. 7<sup>th</sup> ed. London: Routledge.

Cole, C. 2011. A theory of information need for information retrieval that connects information to knowledge. *Journal of the American Society for Information Science and Technology* 62(7):1216-1231.

Collins, G and Quan-Haase, A. 2014. Are social media ubiquitous in academic libraries? A longitudinal study of adoption and usage patterns. *Journal of Web Librarianship* 8(1):48-68.

Connaway, L, Dickey, T and Radford, M. 2011. "If it is too inconvenient I'm not going after it": Convenience as a critical factor in information-seeking behaviours. *Library & Information Science Research* 33(3):179-190.

Connell, R. 2009. Academic libraries, Facebook and MySpace, and student outreach: a survey of student opinion. *portal: Libraries and the Academy* 9(1):25-36.

Cooke, L, Norris, M, Busby, N, Page, T, Franklin, G, Gadd, E and Young, H. 2011. Evaluating the impact of academic liaison librarians on their user community: a review and case study. *New Review of Academic Librarianship* 17(1):5-30.

Creswell, J. 2013. *Research design: qualitative, quantitative, and mixed methods approaches.*4th ed. Thousand Oaks, CA: Sage.

Croft, R and Davis, C. 2010. E-books revisited: surveying student e-book usage in a distributed learning academic library 6 years later. *Journal of Library Administration* 50(5/6):543-569.

Dadzie, P. 2005. Electronic resources: access and usage at Ashesi University College. *Campus-Wide Information Systems* 5(22):290-297.

Dadzie, P.S. 2007. Information literacy: assessing the readiness of Ghanaian universities. *Information Development*, 23(4): 266-277.

Darch, C and Underwood, PG. 1999. Dirt road or yellow brick superhighway? Information and communication technology in academic libraries of South Africa. *Library Hi Tech*, *17*(3): 285-298.

Del Bosque, D, Leif, S and Skarl, S. 2012. Libraries atwitter: trends in academic library tweeting. *Reference Services Review* 40(2):199-213.

Deodato, J. 2015. Evaluating web-scale discovery: a step-by-step guide. *Information Technology & Libraries* 34(2):19-75.

Dickson, A and Holley, R. 2010. Social networking in academic libraries: the possibilities and the concerns. *New Library World* 111(11/12):468-479.

Dlab, M and Hoic-Bozic, N. 2009. An approach to adaptivity and collaboration support in a web-based learning environment. *iJET* 4(53):28-30.

Dwivedi, Y, Kapoor, K, Williams, M and Williams, J. 2013. RFID systems in libraries: an empirical examination of factors affecting system use and user satisfaction. *International Journal of Information Management* 33(2):367-377.

Edmunds, R, Thorpe, M and Conole, G. 2012. Student attitudes towards and use of ICT in course study, work and social activity: a technology acceptance model approach. *British Journal of Educational Technology* 43(1):71-84.

Erens, B. 1996. How recent developments in university libraries affect research. *Library Management*, 17(8): 5-16.

Ezeani, C, Eke, H and Ugwu, F. 2015. Professionalism in library and information science: an examination of current trends, needs, and opportunities in academic libraries in Southeast Nigeria. *The Electronic Library* 33(1):2-18.

Fernàndez, C and Gil-Rodríguez, E. 2011. Facebook as a collaborative platform in higher education: the case study of the Universitat Oberta de Catalunya, in T. Daradoumis, S. Caballé, A. Juan & F. Xhafa, eds. *Technology-enhanced systems and tools for collaborative learning scaffolding*. Berlin Heidelberg: Springer, pp. 27-46.

Fink, A. 2012. *How to conduct surveys: a step-by-step guide*. 5th ed. Thousand Oaks, CA: Sage.

Fisher, C., 2012. Evolving technology and law library planning. *St. John's Law Review* 70(1):15.

Folb, B, Wessel, C and Czechowski, L. 2011. Clinical and academic use of electronic and print books: the Health Sciences Library System e-book study at the University of Pittsburgh. *Journal of the Medical Library Association: JMLA* 99(3):218–228.

Fowler Jr, F. 2013. Survey research methods. 5th ed. Thousand Oaks, CA: Sage.

Ganguly, S. 2009. Gyanoday portal: a virtual reference point for management knowledge repository. *DESIDOC Journal of Library & Information Technology* 29(2):31 -38.

Gardner, S and Eng, S. 2005. What students want: Generation Y and the changing function of the academic library. *portal: Libraries and the Academy* 5(3):405-420.

Gayton, JT. 2008. Academic libraries: "Social" or "communal?" The nature and future of academic libraries. *The Journal of Academic Librarianship*, *34*(1): 60-66.

Germano, M. 2010. Narrative-based library: Selling your library's value during tough economic times. *The Bottom Line* 23(1):5-17.

Golafshani, N. 2003. Understanding reliability and validity in qualitative research. *The Qualitative Report* 8(4):597-606.

Goodall, D and Pattern, D. 2011. Academic library non/low use and undergraduate student achievement: a preliminary report of research in progress. *Library Management* 32(3):159-170.

Gross, M. 2005. The impact of low-level skills on information-seeking behaviour: Implications of competency theory for research and practice. *Reference & User Services Quarterly* 45(2):155-162.

Guba, E and Lincoln, Y. 1994. Competing paradigms in qualitative research. *Handbook of qualitative research* 2:163-194.

Gurikar, R and Mukherjee, B. 2015. Information technology usage scenario in academic libraries of higher education in Chhattisgarh: challenges and opportunities. *DESIDOC Journal of Library & Information Technology* 35(4):273-280.

Haddow, G. 2013. Academic library use and student retention: a quantitative analysis. *Library* & *Information Science Research* 35(2):127-136.

Haddow, G and Joseph, J. 2010. Loans, logins, and the lasting the course: academic library use and student retention. *Australian Academic & Research Libraries* 41(4):233-244.

Halder, S, Ray, A and Chakrabarty, P. 2010. Gender differences in information seeking behavior in three universities in West Bengal, India. *The International Information & Library Review* 42(4):242-251.

Halilovic, S and Cicic, M. 2013. Antecedents of information systems user behaviour-extended expectation-confirmation model. *Behaviour & Information Technology* 32(4):359-370.

Hamade, S. 2013. Perception and use of social networking among university students. *Library Review*, 62(6/7): 388-397.

Henning, E; Van Rensburg, W and Smit, B. 2004. *Finding your way in qualitative research*. Pretoria: Van Schaik.

Hess, AN, LaPorte-Fiori, R and Engwall, K. 2015. Preserving patron privacy in the 21st century academic library. *The Journal of Academic Librarianship* 41(1):105-114.

Hossain, MA. and Quaddus, M. 2012. Expectation—confirmation theory in information system research: A review and analysis, in *Information systems theory*. New York: Springer: 441-469.

Hsu, M, Cummings, R and Wang, S., 2014. Business students' perception of university library service quality and satisfaction. *Contemporary Issues in Education Research (CIER)* 7(2):137-144.

Hua, X, Si, L, Zhuang, X and Xing, W. 2015. Investigations about new methods of library marketing in Chinese "985" Project Universities. *Library Management* 36(6/7):408-420.

Hussain, A and Abalkhail, A. 2013. Determinants of library use, collections and services among the students of engineering: a case study of King Saud University. *Collection Building* 32(3):100-110.

Hyman, J, Moser, M and Segala, L. 2014. Electronic reading and digital library technologies: understanding learner expectation and usage intent for mobile learning. *Educational Technology Research and Development* 62(1):35-52.

Iwhiwhu, BE and Okorodudu, PO. 2012. Public library information resources, facilities, and services: user satisfaction library with the Edo State Central Benin-City, Nigeria. *Library Philosophy and Practice (e-journal)*: paper 747.

Iyoro, A, Isiaka, A and Adesola, A. 2012. Sustainability of Nigeria library users patronage in the era of competitive intelligence. *Library Progress International* 32(2):175-183.

Jaber Hossain, M and Islam, A. 2012. Understanding perceived service quality and satisfaction: a study of Dhaka University Library, Bangladesh. *Performance Measurement and Metrics* 13(3):169-182.

Jamali, R and Sayyadi Tooranloo, H., 2009. Prioritizing academic library service quality indicators using fuzzy approach; Case study: libraries of Ferdowsi University. *Library Management* 30(4/5):319-333.

Jankowska, M, Hertel, K and Young, N. 2006. Improving library service quality to graduate students: Libqual+ TM survey findings in a practical setting. *Portal: Libraries and the Academy* 6(1):59-76.

Jeong, H. 2012. A comparison of the influence of electronic books and paper books on reading comprehension, eye fatigue, and perception. *The Electronic Library*, 30(3): 390-408.

Jiang, JJ and Klein, G. 2009. Expectation Confirmation Theory: capitalizing on descriptive power, in Dwivedi, YK, Lal, B, Williams, MD, Schneberger, SL and Wade, M, (eds), *Handbook of research on contemporary theoretical models in information systems*. Hershey, PA: Information Science Reference: 384-401.

Johnson, M and Finlay, S. 2013. When and where: patron use of computer banks and study rooms. *Library Philosophy and Practice (e-journal)* Paper 991. <a href="http://digitalcommons.unl.edu/libphilprac991">http://digitalcommons.unl.edu/libphilprac991</a> (Accessed 28 May 2016).

Joo, S and Choi, N. 2016. Understanding users' continuance intention to use online library resources based on an extended expectation-confirmation model. *The Electronic Library* 34(4):554-571.

Jowitt, A. 2008. Perceptions and usage of library instructional podcasts by staff and students at New Zealand's Universal College of Learning (UCOL). *Reference Services Review* 36(3):312-336.

Junco, R and Cotten, S. 2012. No A 4 U: The relationship between multitasking and academic performance. *Computers & Education* 59(2):505-514.

Kahn, M and Underwood, PG. 2015. E-book Use in South African Academic Libraries: What Patrons Want. *Library Collections, Acquisitions, & Technical Services*, *39*(1-2): 23-39.

Kamei-Hannan, C, Holbrook, M and Ricci, L. 2012. Applying a response-to-intervention model to literacy instruction for students who are blind or have low vision. *Journal of Visual Impairment & Blindness* 106(2):69-80.

Katz, I. 2013. Testing information literacy in digital environments: ETS's iSkills assessment. *Information Technology and Libraries* 26(3):3-12.

Kavulya, J. 2003. Challenges facing information literacy efforts in Kenya: a case study of selected university libraries in Kenya. *Library Management* 24(4/5):216-222.

Khan, M, Zahid, A and Rafiq, M. 2014. Usability evaluation of University of Management and Technology Library, Lahore website: a survey of users' satisfaction. *Pakistan Library and Information Science Journal* 45(4):30-41.

Khaola, P and Mabilikoane, M. 2015. Perception of library service quality, satisfaction and frequency of use of library resources. *Inkanyiso: Journal of Humanities and Social Sciences* 7(1):44-52.

Kim, H, Abels, E and Yang, C. 2012. Who disseminates academic library information on Twitter? *Proceedings of the American Society for Information Science and Technology* 49 (1):1-4.

Kim, Y. 2011. Users' perceptions of university library websites: a unifying view. *Library & Information Science Research* 33(1):63-72.

Kiran, K. 2010. Service quality and customer satisfaction in academic libraries: perspectives from a Malaysian university. *Library Review* 59(4):261-273.

Kiscaden, E. 2014. Creating a current awareness service using Yahoo! Pipes and LibGuides. *Information Technology & Libraries* 33(4):51-56.

Knight, N. 2013. Enhancing access to library resources at Northern Caribbean University through an e-library initiative. *The Electronic Library* 31(6):753-769.

Kuhlthau, C. 1993. Seeking meaning: A process approach to library and information services. Norwood, NJ: Ablex.

Kumar, P. 2013. Use of internet resources and services among students of Maharishi Markandeshwar University, Mullana. *International Reasearch: Journal of Library and Information Science* 3(3):553-561.

Kumar, P and Mahajan, P. 2015. Use and usage of OPAC in public libraries in Chandigarh City (India): a study. *SRELS Journal of Information Management* 52(3):189-195.

Kuo, J and Zhang, Y. 2013. A study on library users' satisfaction evaluation using sentimental analysis. *Journal of Library and Information Science Research* 7(2):190-197.

Kwanya, T, Stilwell, C and Underwood, P.G. 2013. Intelligent libraries and apomediators: Distinguishing between Library 3.0 and Library 2.0. *Journal of Librarianship and Information Science*, 45(3):187-197.

Kwanya, T, Stilwell, C and Underwood, P. 2014. *Library 3.0: intelligent libraries and apomediation*. Elsevier.

Lack, R, Ball, S, Kujenga, A, Chimuka, Y, Mataranyika, T and Musemburi, D. 2013. Increasing library usage through Free Open Source Software (FOSS) solutions: two case studies from Zimbabwe. *Journal of Library Innovation* 42(4(2):20-36.

Lamothe, A. 2012. Factors influencing usage of an electronic journal collection at a medium-size university: an eleven-year study. *Partnership: The Canadian Journal of Library & Information Practice & Research* 7(1):1-22.

Lin, WS and Wang, CH. 2012. Antecedences to continued intentions of adopting e-learning system in blended learning instruction: a contingency framework based on models of information system success and task-technology fit. *Computers & Education* 58(1):88-99.

Litt, E. 2013. Measuring users' internet skills: a review of past assessments and a look toward the future. *New Media & Society* 15(4):612-630.

Liu, Y and Briggs, S. 2015. A library in the palm of your hand: mobile services in top 100 university libraries. *Information Technology & Libraries* 34(2):133-148.

Lowry, L. 2012. Accounting students, library use, and information competence: evidence from course syllabi and professional accounting association competency maps. *Journal of Business* & *Finance Librarianship* 17(2):117-132.

MacWhinnie, L. 2003. The information commons: the academic library of the future. *Libraries* and the Academy 3(2):241-257.

Madhusudhan, M. 2010. Use of electronic resources by research scholars of Kurukshetra University. *Electronic Library* 28(4):492–506.

Madhusudhan, M and Nagabhushanam, V. 2012. Web-based library services in university libraries in India: an analysis of librarians' perspective. *The Electronic Library* 30(5):569-588.

Makinde, S and Makinde, O. 2013. Library use among Lagos State University students. *PNLA Quarterly* 77(3):21.

Martell, C. 2008. The absent user: physical use of academic library collections and services continues to decline 1995–2006. *The Journal of Academic Librarianship* 34(5):400-407.

Masrek, M and Gaskin, J. 2015. Assessing users' satisfaction with web digital library: the case of Universiti Teknologi Mara. *The International Journal of Information and Learning Technology* 33(1):141-152.

Matthews, J. 2012. Assessing library contributions to university outcomes: the need for individual student level data. *Library Management* 33 (6/7):389-402.

Maull, K, Saldivar, M and Sumner, T. 2012. Automated approaches to characterizing educational digital library usage: linking computational methods with qualitative analyses. *International Journal on Digital Libraries* 13(1):51-64.

May, GS and Arevalo, C. 1983. Integrating effective writing skills in the accounting curriculum. *Journal of accounting Education*, *I*(1): 119-126.

Ming-der Wu, STY. 2012. Effects of undergraduate student computer competence on usage of library electronic collections. *Journal of Library and Information Studies10*(1):1-17.

Mirza, M and Mahmood, K. 2012. Electronic resources and services in Pakistani university libraries: a survey of users' satisfaction. *The International Information & Library Review* 44(3):123-131.

Moyane, S, Dube, L and Hoskins, R., 2015. Evaluating user education programmes for postgraduate students in the School of Management, Information Technology and Governance at the University of KwaZulu-Natal. *South African Journal of Libraries and Information Science* 81(1):28-40.

Mutula, S. 2011. Ethics and trust in digital scholarship. *The Electronic Library* 29(2):261-276.

Nesba, Y. 2014. Building digital collections in a public university library in Ghana: priority-setting and user needs assessment. *Collection Building* 33(2):38-45.

Niyonsenga, T and Bizimana, B. 1996. Measures of library use and user satisfaction with academic library services. *Library & Information Science Research*, 18(3): 225-240.

Nse, J and Okorafor, C. 2011. Comparative study of students' patronage at the academic libraries of two Nigerian universities: FUTO and EEU. *International Information & Library Review* 43 (2):92-98.

Oakleaf, M. 2011. Are they learning? Are we? Learning outcomes and the academic library. *The Library* 81(1):22-45.

Ogunmodede, TA and Emeahara, EN. 2010. The effect of library use education as a course on library patronage: a case study of LAUTECH Library, Ogbomoso, Nigeria. *Library Philosophy* & *Practice (e-journal)* Paper 426. <a href="http://digitalcommons.unl.edu/libphilprac/426">http://digitalcommons.unl.edu/libphilprac/426</a> (Accessed 24 May 2016).

Okon, H and Lawal, O. 2013. Use of electronic resources by graduates' student of the department of educational technology of library science, University of Uyo. *Global Journal of Educational Research* 12(1):9-17.

Oliver, V. 2010. 301 Smart answers to tough business etiquette questions. New York: Skyhorse.

Omotayo, B. 2006. A survey of Internet access and usage among undergraduates in an African university. *International Information & Library Review* 38(4):215-224.

Ondieki Makori, E. 2012. Bridging the information gap with the patrons in university libraries in Africa: the case for investments in Web 2.0 systems. *Library Review* 61(1):30-40.

Opoku, D. 2013. Graduate students' perception and utilization of research commons (Rcs) in the University of Ghana Central Library, Legon. *International Research: Journal of Library and Information Science* 3(3):548-552.

O'Reilly, T. 2005. *Web 2.0: Compact Definition*. Available at: <a href="http://radar.oreilly.com/archives/2005/10/web\_20\_compact\_definition.html">http://radar.oreilly.com/archives/2005/10/web\_20\_compact\_definition.html</a> (Accessed 24 May 2016).

Ortlieb, E. 2014. Attraction Theory. Literacy Research, Practice and Evaluation 4:3-30.

Oukrich, J and Bouikhalene, B. 2017. A Survey of Users' Satisfaction in the University Library by Using a Pareto Analysis and the Automatic Classification Methods. *International Journal of Library and Information Services (IJLIS)*, 6(1): 17-36.

Ozoemelem, O. 2009. Use of electronic resources by postgraduate students of the Department of Library and Information Science of Delta State University, Abraka, Nigeria. *Library Philosophy and Practice (e-journal)* Paper 301. <a href="http://digitalcommons.unl.edu/libphilprac/301">http://digitalcommons.unl.edu/libphilprac/301</a> (Accessed 24 May 2016).

Paterson, L and Low, B. 2011. Student attitudes towards mobile library services for smartphones. *Library Hi Tech* 29(3):412-423.

Phillips, N. 2011. Academic library use of Facebook: building relationships with students. *The Journal of Academic Librarianship* 37(6):512-522.

Pinto, M and Fernández-Ramos, A. 2010. Spanish faculty preferences and usage of library services in the field of science and technology. *portal: Libraries and the Academy* 10(2):215-239.

Poole, H.L. 1985. Theories of the middle range. Norwood, NJ: Ablex.

Procter, R, Williams, R and Stewart, J. 2010. *If you build it, will they come? How researchers perceive and use Web 2.0,* London, UK: Research Information Network (RIN).

Ratna, PA and Mehra, S. 2015. Exploring the acceptance for e-learning using technology acceptance model among university students in India. *International Journal of Process Management and Benchmarking* 5(2):194-210.

Riza Ayua, A and Abrizahb, A. 2011. Do you Facebook? Usage and applications of Facebook page among academic libraries in Malaysia. *The International Information & Library Review* 43(4):239–249.

Roblyer, M, McDaniel, M, Webb, M, Herman, J and Witty, JV. 2010. Findings on Facebook in higher education: a comparison of college faculty and student uses and perceptions of social networking sites. *The Internet and Higher Education* 13(3):134-14.

Roesnita, I and Zainab, A. 2005. The pattern of e-book use amongst undergraduates an Malaysia: a case of to know is to use. *Malaysian Journal of Library & Information Science* 10(2):1-23.

Ross, C, Terras, M, Warwick, C and Welsh, A. 2011. Enabled backchannel: conference Twitter use by digital humanists. *Journal of Documentation* 67(2):214-237.

Sachs, D, Eckel, E and Langan, K. 2011. Striking a balance: effective use of Facebook in an academic library. *Internet Reference Services Quarterly* 16(1-2):35-54.

Sadler, E and Erasmus, BJ. 2005. The academic success and failure of black chartered accounting graduates in South Africa: A distance education perspective. *Meditari Accountancy Research*, *13*(1): 29-50.

Sahu, A. 2007. Measuring service quality in an academic library: an Indian case study. *Library Review* 56(3):234-243.

South African Institute of Chartered Accountants (SAICA). 2011. Competency Framework:

Detailed Guidance for Academic Programmes. Johannesburg: SAICA.

Salisbury, P and Griffis, M. 2014. Academic library mission statement, websites, and communication purpose. *Journal of Academic Librarianship* 40(6):592-596.

Sasireka, G, Balamurugan, S, Gnanasekaran, D and Gopalakrishnan, S. 2011. Use of Eresources in digital environment among engineering institutions in Tamil Nadu (India): an empirical study. *European Journal of Scientific Research*, 60(3): 326-333.

Saunders, L. 2015. Academic libraries' strategic plans: Top trends and under-recognized areas. *The Journal of Academic Librarianship*, 41(3): 285-291.

Saunders, L. 2016. Room for improvement: Priorities in academic libraries' strategic plans. *Journal of Library Administration*, 56(1): 1-16.

Schrader, AM. 1986. The domain of information science: problems in conceptualization and in consensus building. *Information Services and Use* 6:169–205.

Serenko, A, Bontis, N and Moshonsky, M. 2012. Books as a knowledge translation mechanism: citation analysis and author survey. *Journal of Knowledge Management* 16(3):495-511.

Shabani, A, Naderikharaji, F and Reza Abedi, M. 2011. Reading behaviour in digital environments among higher education students: analysis of demographic factors in Iran. *Library Review* 60(8):645-657.

Shankar, V, Smith, AK. and Rangaswamy, A. 2003. Customer satisfaction and loyalty in online and offline environments. *International Journal of Research in Marketing* 20(2):153-175.

Sheikh, A. 2014. Quality of CIIT library services and users satisfaction: a survey of students, faculty and staff members. *Libri: International Journal of Libraries and Information Services* 64(1):49-60.

Shulman, J, Yep, J and Tomé, D. 2015. Leveraging the power of a Twitter network for library promotion. *Journal of Academic Librarianship* 41(2):178-185.

Simon, C. 2009. Graduate business students and business information literacy: a novel approach. *Journal of Business & Finance Librarianship* 14(3):248-267.

Singh, H. 2013. Information seeking behaviour of users of Dr BR Ambedkar NIT Central Library. *DESIDOC Journal of Library & Information Technology* 33(4):338-342.

SJSU iSChool. 2018. Types of Academic Libraries. Available at: <a href="http://ischool.sjsu.edu/career-development/career-direction/environments/academic/library-types">http://ischool.sjsu.edu/career-development/career-direction/environments/academic/library-types</a>. (Accessed 27 May 2018).

Sookhtanlo, M, Mohammadi, H and Rezvanfar, A. 2009. Library information-seeking behaviour among undergraduate students of agricultural extension and education in Iran. DESIDOC Journal of Library & Information Technology 29(4):12-20.

Soria, K, Fransen, J and Nackerud, S. 2013. Library use and undergraduate student outcomes: new evidence for students' retention and academic success. *portal: Libraries and the Academy* 13(2):147-164.

Soria, K, Fransen, J and Nackerud, S. 2014. Stacks, serials, search engines, and students' success: First-year undergraduate students' library use, academic achievement, and retention. *The Journal of Academic Librarianship* 40(1):84-91.

South African Institute of Chartered Accountants (SAICA). 2011. Competency Framework:

Detailed Guidance for Academic Programmes. Johannesburg: SAICA.

Spink, A and Cole, C. 2006. Human information behaviour: integrating diverse approaches and information use. *Journal of the American Society for Information Science and Technology* 57(1):25-35.

Srot, K, Cagran, B and Grmek, M. 2013. The role of University of Maribor Library in library information literacy training of high school students. *School Libraries World Wide* 19(1):28-44.

Stamatoplos, A and Mackoy, R. 1998. Effects of library instruction on university students' satisfaction with the library: a longitudinal study. *College & Research Libraries* 59(4):322-333.

Stone, G and Collins, E. 2013. Library usage and demographic characteristics of undergraduate students in a UK university. *Performance Measurement and Metrics* 14(1):25-35.

Stone, G and Ramsden, B. 2013. Library Impact Data Project: looking for the link between library usage and student attainment. *College & Research Libraries* 74(6):546-559.

Stvilia, B and Gibradze, L. 2014. What do academic libraries tweet about, and what makes a library tweet useful? *Library & Information Science Research* 36(3-4):136–141.

Sue, V and Ritter, L. 2012. Conducting online surveys. Los Angeles, CA: Sage.

Sugimoto, CR, Li, D, Russell, TG, Finlay, SC and Ding, Y. 2011. The shifting sands of disciplinary development: analyzing North American Library and Information Science dissertations using latent Dirichlet allocation. *Journal of the American Society for Information Science and Technology* 62(1):185-204.

Sun, H, Chen, K, Tseng, C and Tsai, W. 2011. Role changing for librarians in the new information technology era. *New Library World* 112(7/8):321-333.

Tuamsuk, K, Kwiecien, K and Sarawanawong, J. 2013. A university library management model for students' learning support. *The International Information & Library Review*, 45(3-4): 94-107.

Teferra, D and Altbachl, P. 2004. African higher education: challenges for the 21st century. Higher Education 47:21-50.

Tenopir, C. 2011. Beyond usage: measuring library outcomes and value. *Library Management* 33(1/2):5-13.

Thanuskodi, S. 2011. Usage of electronic resources at Dr T.P.M. Library, Madurai Kamaraj University: a case study. *DESIDOC Journal of Library & Information Technology* 31(6):437-445.

Tiryakian, E. 1966. A problem for the sociology of knowledge the mutual unawareness of Émile Durkheim and Max Weber. *European Journal of Sociology* 7(2):330-336.

Townley, CT. 2001. Knowledge management and academic libraries. *College & Research Libraries*, 62(1): 44-55.

Umeozor, S. 2013. Human resources, user education marketing strategy, and students' use of library services in some Nigerian Federal universities. *Library Philosophy and Practice (e-journal* Paper 888. <a href="http://digitalcommons.unl.edu/libphilprac/88">http://digitalcommons.unl.edu/libphilprac/88</a> (Accessed 24 May 2016).

Verma, MK and Parang, B. 2015. Use and user's satisfaction on library resources and services by students of School of Physical Sciences, Mizoram University, Aizawl: a study. *Information Studies* 21(2/3):193-204.

Wai Fan, K. 2005. The role of university libraries in supporting research in Hong Kong: facing a new challenge. *Campus-Wide Information Systems*, 22(1): 43-50.

Wang, C, Ke, H and Lu, W. 2012. Design and performance evaluation of mobile web services in libraries: a case study of the Oriental Institute of Technology Library. *The Electronic Library* 30(1):33-50.

Way, D. 2010. The impact of web-scale discovery on the use of a library collection. *Serials Review* 36(4):214-220.

Williams, S, Terras, M and Warwick, C. 2013. What do people study when they study Twitter? Classifying Twitter related academic papers. *Journal of Documentation* 69(3):384-410.

Wilson, TD. 1998. Redesigning the university library in the digital age. *Journal of Documentation*, 54(1): 15-27.

Wilson, J. 2014. Essentials of business research: A guide to doing your research project. London: Sage.

Wilson, T. 2000. Human information behaviour. *Informing Science* 3(2):49-56.

Zabed Ahmed, SM. and Hossain Shoeb, Z. 2009. Measuring service quality of a public university library in Bangladesh using SERVQUAL. *Performance Measurement and Metrics* 10(1):17-32.

## **APPENDIX A: QUESTIONNAIRE**

**Title of the study:** Library usage by university accounting students: a comparison of conventional and open distance learning institutions

Dear Participant,

## Introduction

My name is Saidat Abiola Fakoya-Michael and I am conducting research for the degree of Master of Information Science of the University of South Africa, under the supervision of Emeritus Professor Peter G. Underwood.

I am inviting you to participate in a study to investigate the usage by students of accountancy of academic libraries in two South African universities. Your assistance will be much appreciated.

The information you supply is anonymous: no personal details will be gathered. It will take you about ten minutes to complete the questionnaire.

My contact details, if you need to clarify any matters relating to the questions, are: 45287767@mylife.unisa.ac.za and those of my Supervisor are: pgunderwood@wol.co.za

Please help us further improve Information Services by taking a few minutes to complete this short questionnaire

Please complete <u>all</u> questions apart from the last Question 13 (any other comments and suggestions), which is optional

Please **TICK** the choice that best reflects your view.

Section A: About You

2. Are you:

1. Which group are you in?

Undergraduate	
Postgraduate (Taught Course)	
Postgraduate (Research)	
Other	

Full-Time		
Part-Time		
Not Applicable		
3. Which University are you in:		
A: University of South Africa		
B: University of Limpopo		
4. What is your age group:		
21 years and under		
22 – 26 years		
27 – 39 years		
40 – 49 years		
50 and over		
5. Are you:		
Female		
Male		
Section B: Your Use of Library and	Information Se	ervices
6. Which branch of the Library do	you use most	frequently?
Main Library		
Learning Resources Centre		
Not applicable		

7. On average, how frequently do you visit that l	ibrary?
Several times a day	
Once a day	
Several times a week	
Once a week	
Less than once a week	
Less than once a month	
8. On average, how often do you access library a (eg the library catalogue, e-journals, electronic r	
Several times a day	
Once a day	
Several times a week	
Once a week	
Less than once a week	

## 9. Please think about the various activities you did the last time you visited the library <u>in person</u>. How successful were you in completing these?

	Very	Fairly	Neither	Fairly	Very
	successful	successful	successful		unsuccessful
			nor	unsuccessful	
			unsuccessful		
Looked for					
library					
materials on the					
shelves					
Sought help					
from library					
staff					
Borrowed					
library					
materials					
Used a					
computer in the					
library					

## 10. Please think about the various activities you did the last time you accessed library and information services via a computer. How successful were you in completing these?

	Very successful	Fairly successful	Neither	Fairly	Very unsuccessful
	successiui	successiui	successful nor	unsuccessful	unsuccessiui
			unsuccessful	unsuccessiui	
Used the					
library					
catalogue					
Made a					
reservation on					
the library					
system					
Renewed a loan					
on the library					
system					
Used an					
electronic					
journal					
Used an					
electronic					

resource (eg			
Web of			
Knowledge)			

## 11. Please rate your satisfaction with the following library services, along with how important you think they are:

	Very	Fairly	Neither satisfied	Fairly	Very
	satisfied	satisfied		dis- satisfied	dis-satisfied
			dis-satisfied		
Range of books					
Course books and essential texts					
Range of e-books					
Range of print journals					
Range of electronic journals					
Photocopying					
Printing					
Study facilities (study desks, etc.)					
Provision of computers					
Reliability of computers					
Library catalogue					
Library website (other than library catalogue)	,				
Range of electronic resources (e.g. Web of Knowledge.)					
Opening hours					
Library environment (noise, heating, ambience, etc.)					
Helpfulness of the library staff					

gree or di	sagree wit	th the follov	ving statem	ent:
Strongly agree	Slightly agree	agree nor	Slightly disagree	Strongly disagree
ons?				
	Strongly	Strongly Slightly agree agree	Strongly Slightly Neither agree agree nor disagree	agree agree disagree nor disagree

### Submit survey

Thank you for completing this questionnaire

The findings will be used to make further improvements to

our library and information services

APPENDIX B: ETHICAL CLEARANCE

UNISA university of south africa

PARTICIPANT INFORMATION SHEET

October 2016

Title: Library Usage by University Accounting Students: A Comparison of

Conventional and Open Distance Learning Institutions

**Dear Prospective Participant** 

My name is Saidat Abiola Fakoya-Michael and I am doing research with Prof Peter

Underwood, a professor, in the Department of Information Studies towards a Master of Arts

Degree in Information Science at the University of South Africa. We have funding from

UNISA Postgraduate Bursary for Master's research. We are inviting you to participate in a

study entitled Library Usage by University Accounting Students: A Comparison of

**Conventional and Open Distance Learning Institutions.** 

WHAT IS THE PURPOSE OF THE STUDY?

I am conducting this research to investigate the motivation for usage of academic

library by accounting students in a contact learning institution and open distance

learning universities in South Africa.

WHY AM I BEING INVITED TO PARTICIPATE?

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All second and third years accounting students from both institutions were expected

to complete the questionnaire. This stratum was selected because the researcher

assumed they have acquired experience to provide reliable responses to the study

questionnaire based on their patronage and usage of library resources in each of these

institutions. Although it was not possible to exactly determine the size of the student

population in this group, the researcher considered all second and third years

accounting students in each of the institutions.

The researcher obtained the participants' contact details through the UNISA intranet system

for mailing to accounting students studying through UNISA and through contact with the

Director, School of Accountancy at the University of Limpopo utilizing a focus group approach

to administer the questionnaire during lecture time. Reason for this is because of the

researcher's connection with UL from studying at the institution.

WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?

The study involves *questionnaires*. Participants are expected to choose between

options ranging from Strongly Disagree to Strongly Agree on structured statements

relating to the research problem being investigated. The questions are scaled

between: 1 -you strongly agree with the statement; 2-you agree with the statement; 3

-you are not sure about the statement; 4 -you disagree with the statement; 5 -you

strongly disagree with the statement. This questionnaire requires about 20 minutes of

your precious time to complete at the maximum.

# CAN I WITHDRAW FROM THIS STUDY EVEN AFTER HAVING AGREED TO PARTICIPATE?

Statement that participation is voluntary and that there is no penalty or loss of benefit for non-participation. Participating in this study is voluntary and you are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason. However, once you have submitted the completed questionnaire, it will no longer be possible for you to withdraw your participation. You are not required to disclose your identity on the questionnaire.

#### WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

The potential benefit of your participation in completing this questionnaire is to assist librarians and policy makers improve library service delivery to university students, particularly, accounting students, of which you specially belong to.

# ARE THEIR ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?

There is no potential risk or discomfort to you for participating in completing this questionnaire. Your participation will be kept discreet. Hence, you will not be linked to this study in any way.

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WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY

**BE KEPT CONFIDENTIAL?** 

Your name will not be recorder anywhere in the study and no one, apart from the researcher

and identified members of the research team, will know about your involvement in this

research. Your answers will be given a code number or a pseudonym and you will be referred

to in this way in the data, any publications, or other research reporting methods such as

conference proceedings.

Data provided through your participation will be analysed using SPSS package, hence, no

individuals' other than the research team will have access to your original submission. Your

answers may be reviewed by people responsible for making sure that research is done

properly, including the transcriber, external coder, and members of the Research Ethics

Review Committee. Otherwise, records that identify you will be available only to people

working on the study, unless you give permission for other people to see the records. A report

of the study may be submitted for publication, but individual participants will not be identifiable

in such a report.

HOW WILL THE RESEARCHER(S) PROTECT THE SECURITY OF DATA?

Hard copies of your answers will be stored by the researcher for a period of five years in a

locked cupboard/filing cabinet in the researcher's personal storage facility for future research

or academic purposes; electronic information will be stored on a password protected

computer. Future use of the stored data will be subject to further Research Ethics Review and

approval if applicable. Hard copies will be shredded and/or electronic copies will be

permanently deleted from the hard drive of the computer using a relevant software

programme.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS

STUDY?

No financial reward is available for participating in this study. Your participation is therefore

considered voluntary.

HAS THE STUDY RECEIVED ETHICS APPROVAL?

This study has received written approval from the Research Ethics Review Committee of the

Department of Information Studies Research Ethics Committee, UNISA. A copy of the

approval letter can be obtained from the researcher if you so wish.

HOW WILL I BE INFORMED OF THE FINDINGS/FINDINGS OF THE RESEARCH?

If you would like to be informed of the final research findings, please contact the researcher

on 45287767@mylife.unisa.ac.za. The findings are accessible for one year after the

conclusion of the study.

Should you require any further information or want to contact the researcher about any aspect of this study, please contact <u>45287767@mylife.unisa.ac.za</u>.

Should you have concerns about the way in which the research has been conducted, you may contact Prof Peter Underwood, the supervisor on <a href="mailto:pgunderwood@wol.co.za">pgunderwood@wol.co.za</a>.

Thank you for taking time to read this information sheet and for participating in this study.

Thank you.

Saidat Abiola Fakoya-Michael

Interfacel SA



### **CONSENT TO PARTICIPATE IN THIS STUDY**

I, (participant name), confirm that the person asking my consent to
take part in this research has told me about the nature, procedure, potential benefits and
anticipated inconvenience of participation. I have read (or had explained to me) and
understood the study as explained in the information sheet. I have had sufficient opportunity
to ask questions and am prepared to participate in the study. I understand that my participation
is voluntary and that I am free to withdraw at any time without penalty (if applicable).
I am aware that the findings of this study will be processed into a research report, journal
publications and/or conference proceedings, but that my participation will be kept confidential
unless otherwise specified.
I agree to the recording of the questionnaire.
I have received a signed copy of the informed consent agreement.
Participant Name & Surname(please print)
Participant SignatureDateDate
Researcher's Name & Surname Saidat Abiola Fakoya-Michael
fortaginal SA

Researcher's signature

Date 2016-10-10





#### **INFORMED CONSENT LETTER**

Request for permission to conduct research at the School of Accountancy, University of Limpopo

"Library Usage by University Accounting Students: A Comparison of Conventional and Open Distance Learning Institutions"

October 2016

Prof CM Ambe

New R Block Room 2001

Director, School of Accountancy, University of Limpopo

0152682630; cosmas.ambe@ul.ac.za

Dear Prof Cosmas Ambe.

I, Saidat Abiola Fakoya-Michael am doing research with Prof Peter Underwood, a professor in the Department of Information Studies towards a Master of Arts Degree in Information Science at the University of South Africa. UNISA Postgraduate Bursary for Master's research. We are inviting you to participate in a study entitled Library Usage by University Accounting Students: A Comparison of Conventional and Open Distance Learning Institutions.

The aim of the study is to investigate the motivation for usage of academic library by accounting students in a contact learning institution and open distance learning universities in South Africa.

Your company has been selected because it is a contact university that can be compared in terms of findings of this study to the distance learning institution selected since both are in the same country.

The study will entail the completion of *questionnaires*. Participants are expected to choose between options ranging from *Strongly Disagree* to *Strongly Agree* on structured statements relating to the research problem being investigated. The questions are scaled between: 1 -you strongly agree with the statement; 2-you agree with the statement; 3 -you are not sure about the statement; 4 -you disagree with the



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statement; 5 -you strongly disagree with the statement. This questionnaire requires

about 20 minutes of your precious time to complete at the maximum. The potential

benefit of your participation in completing this questionnaire is to assist librarians and policy

makers improve library service delivery to university students, particularly, accounting

students, of which you specially belong to.

There is no potential risk or discomfort to you for participating in completing this questionnaire.

Your participation will be kept discreet. Hence, you will not be linked to this study in any way.

Feedback procedure will entail accounting students' completion of the questionnaire.

Yours sincerely

- Antartael SA

Saidat Abiola Fakoya-Michael

Researcher

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