



*Students' perceptions about the Library and Information
Science (LIS) programme and its career opportunities in South
Africa*

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This dissertation is submitted in fulfilment of the requirements for the award of the Master's degree in Information Science at the Department of Information Studies, University of Zululand.

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2020

DECLARATION

I, Talente Nokukhanya Sibiya, hereby declare that this dissertation, *Students' perceptions about the Library and Information Science (LIS) programme and its career opportunities* is my own original research dissertation, it has not been submitted by me or anyone else to any other university or tertiary institution for the award of any degree or other qualification. All information used in this study has been accordingly recognised in the text and references.

Signature

Supervisor: Dr M.M. Shongwe

Signature.....

DEDICATION

I know how to live on almost nothing or with everything. I have learned the secrets of living in every situation, whether it is with full stomach or empty, with plenty or little (Philippians 4:12)

I have learned to overcome all circumstances encountered; consequently, I dedicate this work to God.

ACKNOWLEDGEMENTS

Give thanks to the Lord, for he is good. His faithful love endures forever (Psalm 107:1)

- I would like to thank my supervisor, Dr Mzwandile M. Shongwe, for his consistent supervision and support. Completing this study would not be possible without your endless assistance. You have been patient with me from the beginning to the end; may God bless you.
- I am also grateful to my family and friends for their inspirational support and belief in me.
- To Nselelo Sibiya and Sihle Xaba, thank you for encouraging and supporting me whenever I needed your assistance.
- Thanks to the University of Zululand and to Durban University of Technology staff for allowing me to collect data from students.
- To the students who participated in this study, thank you so much. Without you, this research would not have been possible.
- To the South African Library and Information Science Trust (SALI) for awarding me a bursary for publication costs.
- To the University of Zululand research committee, for granting this study financial resources and providing me with the necessary ethical clearance.

ABSTRACT

The subject literature reveals that most students study LIS after as an alternative to their dream career choices. The students who enrol in LIS do not have a clear understanding of the programme, the profession and the availability of career opportunities. This study sought to investigate students' perceptions of the LIS programme and its career opportunities. Establishing how students perceive the programme and its employment prospects is crucial after graduating. Previous studies in South Africa have not addressed the profound concerns caused by students' reasons for studying LIS and their awareness of the career opportunities offered by the profession. This study was guided by the Circumscription and Compromise theory (Linda Gottfredson, 1981, 1996).

This study used the survey research method to collect data. Qualitative and quantitative data were collected using a questionnaire with open-ended and closed-ended questions. The target population was first-year and final-year undergraduate students, purposely sampled from two universities in the KwaZulu-Natal (KZN) province of South Africa. The universities are the University of Zululand (Unizulu) and the Durban University of Technology (DUT). There were 71 first-year and 66 final-year students who participated in the study, thus a total of 137 students. The qualitative data was analysed using qualitative contents analysis, whereas quantitative data were analysed using descriptive statistics. The Statistical Package for Social Sciences (SPSS) was used as a data analysis tool.

The study revealed that not all students were aware of LIS programmes while studying at high school. The majority from both groups indicated that they had become aware of LIS as an area of study after finishing high school and others only once they had arrived at university, which means that students decided to study LIS after finishing high school. Relatives and information brochures were found to be significant motivating factors that influenced students to enrol in LIS. The study found that the majority of students did not consider LIS as their first choice, but only their second and subsequent choice, which makes LIS their compromise field of study.

The study found that at first none of the students had a clear understanding of what the programme comprises. However, the study findings shows that as time went by, students' knowledge of LIS changed and they became knowledgeable of LIS. It was also found that some students are completely satisfied with the programme, although others are not. The reason is that LIS was not their first career choice, and some still want to pursue their dream career choices.

The findings reveal that students are aware of LIS career opportunities. The position of librarian is most preferred by most of the students. It was also found that career guidance and LIS lecturers played important roles in educating students about LIS career opportunities. Students are motivated to continue studying towards a LIS qualification because of the availability of LIS employment opportunities and the congenial LIS work environment. Salary and the profession's prestige had less of an impact on students' motivation. The findings revealed that students are generally positive in believing that the LIS field has enough job opportunities. However, most final-year students were not convinced that there are adequate LIS career opportunities.

The study concluded that the LIS programme is not well marketed to young people and that it is a compromise field of study. The study therefore recommends that there should be LIS career awareness campaigns in public libraries, in primary and in high schools to sensitise students about the LIS field.

Keywords: LIS career opportunities, LIS perceptions, library and information science, job market, undergraduate students, circumscription and compromise

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ABBREVIATIONS

DBN	: Durban
DUT	: Durban University of Technology
ICT	: Information Communication Technology
IT	: Information Technology
KZN	: KwaZulu-Natal
LIS	: Library and Information Science
MUT	: Mangosuthu University of Technology
PMB	: Pietermaritzburg
SALA	: South Africa Library Association
SA	: South Africa
SPSS	: Statistical Package for Social Sciences
UKZN	: University of KwaZulu-Natal
UAE	: United Arab Emirates
UNIZULU	: University of Zululand

CHAPTER ONE: INTRODUCTION AND THE BACKGROUND

1.1 Introduction

The career development process incorporates different factors such as abilities, values, interests, goals and perceptions concerning the job market (Holland, 1997). Deciding on a career is a multifaceted development process that starts in the early stages when people initially discover the world of work (Jones, 2008:1). Consequently, young people learn about various professions. They additionally build up an understanding of one's own professional goals and potential career matches (Jones, 2008). Nevertheless, the Library and Information Science (LIS) profession and its career opportunities are still an issue to students who are registered in the field. For this reason, students might not have chosen a LIS career path, since it is still perceived as an inferior career (Egunjobi, Salisu and Ogunkeye, 2014). Ismail (2006:29) noted that some students do not choose LIS programmes from the beginning of their studies but at a later stage.

Madu, Odenigbo and Tongs (2014), Newbutt and Sen (2009) share a similar view, that the perceptions of students of what librarianship involves may originate from the common stereotypes of librarians as old people shelving, and stamping, library collections. Newbutt and Sen (2009: 47) state that individuals' perception of LIS may be linked to their own enthusiasm for taking it as a profession. That may also mean that some peoples' future professions are not affected by their environment or foundation. From the reviewed literature, it was found that in South Africa, numerous studies conducted focus on the LIS job market, LIS education and training and the LIS curriculum and programme offered by LIS Schools (Shongwe and Ocholla, 2011; Ocholla and Shongwe, 2013), cataloguing and classification education (Ocholla and Ocholla, 2014, Sibiya and Shongwe, 2018), and trends, challenges and opportunities for LIS education (Ocholla and Bothma, 2007).

There are limited studies that have been done on students' perceptions of the LIS programme and its career opportunities. Van House (1988) proposed that more investigation is required on students' perceptions and career choices; the processes of students' reaching a decision to enrol in the programme. Hallam and Partridge (2005: 8) state that students' perceptions and inspiration for

entering in the profession have not been studied widely. Taylor *et al.* (2010) agree and state that it is imperative to investigate why students choose to study LIS, so that the field can actively recruit new students to avoid enrolling students that are not interested in the programme. Alansari (2011:577) opines that an enormous number of studies dealing with the career choices of LIS professionals and employment fulfilment have originated from Western countries. Based on the brief discussion about it, the study investigated LIS students' perceptions of the LIS programme and its career opportunities in South Africa. That is, what factors influenced students to choose this programme and their perceptions about LIS job opportunities.

1.2 Contextual setting

The study focused on two LIS schools in the KwaZulu-Natal (KZN) province. KZN has four recognised institutions of higher learning. There are two universities of technology, namely Mangosuthu University of Technology (MUT) and the Durban University of Technology (DUT), and two traditional universities, which are the University of KwaZulu-Natal (UKZN) and the University of Zululand (Unizulu). Of these four universities, three offer Library and Information Science or Information Studies. They are Unizulu, DUT and UKZN. The following subsection discusses the two institutions that participated in the study, the University of Zululand and the Durban University of Technology.

1.2.1 University of Zululand

The University of Zululand (Unizulu) is situated in rural KZN, approximately 142 km north of Durban on the national toll road, the N2. The university has two campuses, the main campus at KwaDlangezwa, 20 km south of the town of Empangeni and the other campus in Richards Bay. The University of Zululand is a comprehensive tertiary institution, offering vocational programmes as well as theory-based programmes. This role is divided between the two campuses with KwaDlangezwa campus offering largely the theory segment and Richards Bay the vocational segment. It has four faculties: Arts; Education; Commerce, Administration, and Law; and Science and Agriculture. The Department of Information Studies falls within the Faculty of Arts (University of Zululand website, 2018). According to the Faculty of Arts handbook (2018), the Department of Information Studies offers the following five programmes: Post-graduate Diploma in Library and Information Science (not offered in 2018 due to staff shortages), Bachelor of Arts in Information Science, Bachelor of Library and Information Science, Bachelor of Arts Honours

in Information Sciences, Master of Arts in Information Sciences and Doctor of Philosophy in Library and Information Science.

1.2.2 Durban University of Technology

DUT has campuses situated in the cities of Durban (DBN) and Pietermaritzburg (PMB). As a University of Technology, it prioritises the quality of teaching and learning by ensuring its academic staff possesses the highest possible qualifications. DUT is the result of the merger in April 2002 of two technikons, ML Sultan and Technikon Natal. It was named the Durban Institute of Technology and later became into the Durban University of Technology in line with the rest of the universities of technology. The university has seven campuses. They are: Riverside Campus; Steve Biko Campus; Indumiso Campus; Brickfield Campus; Ritson Campus; ML Sultan Campus and City Campus. DUT has six faculties, which are the Faculties of Arts and Design; Applied Science; Health Sciences; Management Sciences; Engineering and the Built Environment; and Accounting and Informatics (Durban University of Technology Website, 2018). At the Durban University of Technology, the Department of Library and Information Studies offers a Diploma in Library and Information Studies (Faculty of Accounting and Informatics handbook, 2018).

1.2.3 Library and Information Science in South African LIS schools

Library and Information Science schools are crucial to the transformation of any country and the South African education system in particular (Minishi-Majanja and Ocholla, 2004 as cited in Minishi-Majanja, 2009: 43). LIS schools in South Africa offer three levels of postgraduate and three levels of undergraduate programmes. The undergraduate programmes include Diplomas, a Bachelor's degree, and Certificates, whereas postgraduate studies include the Postgraduate Diploma, Honours Degree, Master's Degree and Doctoral studies (PhDs).

According to Ocholla and Bothma (2007: 63), some LIS schools focus on related information fields such as publishing, records management, multimedia and information technology and knowledge management, either as independent qualifications or as integrated disciplines within LIS qualifications. LIS schools in Africa focus on the education and training of librarians. Fraser-Arnott (2017:187) state that traditional jobs in LIS are slowly disappearing.

1.3 Statement of the problem

Choosing a profession is a decision that most people make in their lives; that should be considered important by individuals who are in secondary school and the individuals who are going to enter advanced education levels (Eyo, 2011:328). This is consistent with the individuals who need to pursue a career in librarianship. It is perceived that many students do not choose a career in LIS from the start of their enrolment (Newbutt and Sen, 2009: 6). Adamu and Amekuede (2010: 317) believe that the majority of students develop a liking for LIS and remain in the profession after some time. They are supported by Aghaiche, Anyaegdu and Madubueze (2015: 2) who state that first-year students in LIS consider the course only after they have been rejected by their first and second career choices. Nonetheless, the misunderstanding of what the role of a librarian involves, and the lack of familiarity with librarianship as an expert profession resulted in young people not wanting to become librarians (Newbutt and Sen, 2009: 10). This shows that librarianship might not be appealing to young people. Ismail (2006) is of the opinion that there is a need to know how students perceive LIS and its job opportunities. Mugot (2012) concurs and states that there is a need to know how undergraduate students perceive LIS programmes and their career opportunities. Identifying reasons why individuals enter the LIS course would empower them to more readily comprehend the necessities and expectations of LIS students (Lo *et al.*, 2015:195). Ismail (2006) proposed that more research is required on career choices, personal influences and environmental factors and on the processes students follow to enter in LIS. Furthermore, Lo *et al.* (2015:195) state that studies investigating why students choose a career in LIS are essential to the LIS community, specifically for the educators, as they provide important information on various recruiting trends and other career issues related to the LIS profession. This investigation, therefore, addresses these concerns. This issue is not well addressed in South Africa, thus there is a need to investigate how students perceive LIS programmes and LIS as a profession.

1.4 Aim of the study

The aim of the study was to investigate the perceptions of undergraduate students enrolled in the LIS programme.

1.5 Objectives of the study

The study has the following objectives:

- To investigate what has influenced students to enrol into the LIS programme.
- To determine the students' perceptions of LIS programme.
- To establish the students' awareness of LIS career opportunities.

1.6 Significance of the study

The study involved a population of LIS students whose perceptions had never been investigated previously in South Africa. The investigation identified the motivating factors why students chose to enrol in the programme and their perceptions of its career opportunities. The findings have led to greater insights into the reasons why students enrol for LIS. The findings have also determined students' knowledge and perceptions about career opportunities in LIS. It is anticipated that the LIS society will use the results for recruitment purposes. The study has also contributed to the existing body of knowledge on the perception of LIS students about their programme.

1.7 Scope and delimitations

The study covered undergraduate LIS students from two institutions in the province of KwaZulu-Natal. These schools are: the Department of Information Studies at Unizulu, the Department of Information and Corporate Management at DUT. Only first-year and final-year students were included in the study. First-years were chosen because they are new to the programme and they may have different opinions from the experienced final-year students.

1.8 Theoretical framework scope

The current study was informed by the Circumscription and Compromise Theory of Gottfredson (1981, 1996). The theory was chosen because of its significance to career choice decision-making process of LIS students. The theory describes the model young people develop and decide which career to pursue after comparing available careers with their self-concepts. According to Mtemeri (2014), students live in a social world where they search for career guidance from their surroundings. Hence, the Circumscription and Compromise theory believes that the choices and development of careers could be viewed as a process of circumscription or elimination in which

an individual progressively eliminates specific careers (Gottfredson, 2005). The elimination of a career could be caused by different uncontrollable factors, both external and internal. The theory also deals with the cognitive growth and self-creation of individuals at different development stages. Gottfredson (2005) believes that a young person considers careers that are suitable and compatible with one's internal self. On the compromise development process, it is believed that an individual compromises some of the careers in response to external realities such as inaccessibility of some occupations, family obligations and economic depression that are generally all beyond the control of a person (Sharma, 2016). Therefore, the theory is relevant to this study because it includes factors that impact and motivate individuals to consider their preferred careers, developmental stages and when a person becomes aware of certain occupations. The theory is discussed in detail in Chapter Two of the study.

1.9 Literature review scope

This study has reviewed literature from different information resources which include published and unpublished sources to answer the research question. The literature review for this current study has provided knowledge to support the identified research question. The literature was reviewed to describe, evaluate and summarise what was discovered by the other researchers and make a comparison with the current study results. The literature review's scope focuses on LIS students' perceptions, LIS career opportunities, LIS education, the factors that influence students to pursue LIS, LIS career opportunities and the marketing of LIS. The literature review is discussed in detail in Chapter Three.

1.10 Research design overview

This study has used research design in investigating the study research question. A philosophical view of the study was informed by paradigms of both ontology and epistemology. Ontologically, the study used idealism to investigate how LIS students perceive the nature of the LIS programme and its career opportunities. The researcher believes that the reality of the study phenomenon can only be constructed in the minds of the students. Epistemologically, the study used positivism. Positivism's paradigm dictates that only phenomena that can be known through the senses can truly create information; hence, the researcher believes that the knowledge of LIS and its career opportunities can be created through the experiences and observation of individuals. Inductive reasoning was employed to draw a conclusion from the study's results. The study targeted

undergraduate LIS students from two LIS schools in the province of KwaZulu-Natal. Qualitative and quantitative research methodologies were employed to collect data. A survey census of undergraduate LIS students was employed. The research data was collected through an unstructured and structured questionnaire. Data were analysed by the use of statistical analysis and content analysis. Quantitative and qualitative data were triangulated.

1.11 Definition of key concepts

This section explains the main concepts that are relevant to this dissertation. These concepts form the working definitions for the current study.

1.11.1 Library and Information Science (LIS)

There is no generally agreed difference between Library and Information Science, Librarianship and Library Science (Issa, 2013:51). Library and Information Science is an interdisciplinary science integrating the law, humanities and applied sciences to study subjects relating to libraries, e.g. the acquisition, organisation, conservation, and distribution of library materials (Issa, 2013). Taylor and Parish (2009:344) define library and information science as the profession devoted to applying theory and technology to the creation, selection, organisation, management, dissemination, and utilisation of collection of information in all formats. They are classified according to the type of library in which they work, which could be school, academic, public or special libraries (Carvell, 2005: xx). Aghauche, Anyaegbu and Madubueze (2015: 70) define Library and Information Science as the profession that is devoted to helping people, providing timely and accurate information. Hayes (1985) as cited in Lugya (2014: 36) states that Library and Information Science is the discipline concerned with library collections. It is also concerned with intellectual processes as managed by individuals.

1.11.2 Job market

The American Heritage Dictionary (2011) defines the job market as the market in which employees and employers search for employability. It is not a physical place; the job market can grow depending on the labour demand and supply within the overall economy, industries, and the level of education or specific job function. The job market is the number of jobs available in an industry or organisation for those who are looking for employment (Van House, 1988).

1.11.3 Perception

Perception is the selection, organisation, and interpretation of sensory input. It is the process of obtaining information about both the external and internal environments which results in the integration and utilising of memory, in the conscious experience, recognition, and interpretation of objects, object relationships, and events. Perception is an aspect of cognition, a private and individualistic experience (Gould, 2003).

1.12 Knowledge dissemination

The researcher is expected to disseminate the results of the study at conferences and in journal articles. The findings of this study were presented at the Annual Department of Information Studies Conference. A journal article was submitted to *Libri*, an LIS journal. The University of Zululand has institutional repository; this study will also be accessible in the University repository. Another copy of the finding will be shared with the Durban University of Technology where data were collected.

1.13 Outline of the dissertation

The dissertation is divided into seven chapters.

Chapter One	Chapter One provides the introduction and background of the investigation, statement of the problem, aim and objectives, questions and significance of the study and additionally the definition of the exploration's key terms. The chapter was significant, as it presents and narrows the issue that is being examined.
Chapter Two	This chapter presents the theoretical framework that informed the study.
Chapter Three	The literature review of the study is discussed in this chapter. The following headings are comprehensively discussed: LIS schools in South Africa, students' career choices, LIS job markets in Africa and internationally, the students' perceptions of LIS.

Chapter Four	This chapter presents the research methodologies, paradigms, research strategy, sampling and population, data collection techniques, procedure, and data analysis that was carried out.
Chapter Five	This chapter presents and analyses collected data. Qualitative and quantitative data are presented simultaneously.
Chapter Six	This chapter discusses the research findings of the study that were analysed in Chapter Five.
Chapter Seven	This chapter gives the summary, conclusion and the recommendations of the student's perception of Library and Information Science and its career opportunities.

1.14 Summary

This chapter discussed the background to the study; the contextual setting of the study was outlined as well. The statement of the problem, aim and objectives of the study were also stated, and the significance and ethical issues were discussed in this chapter. The scope and limitations were also highlighted. The background of the study stressed that the LIS programme registered students who get to know the programme after failing to get admission to their first preference courses. The literature indicates that LIS students' perceptions have not been addressed extensively. The next chapter discusses the theoretical framework.

CHAPTER TWO: THEORETICAL FRAMEWORK

2.1 Introduction

This chapter discusses the theoretical framework used in the study. It outlines the main theory used and other theories relevant to the research study. The researcher found that there is limited theory that focuses on the perceptions of the LIS profession. The research study adopted a theory borrowed from psychology because of the unavailability of suitable theories in the Library and Information Science (LIS) profession. According to Ocholla and LeRoux (2011:1), LIS does not have unique theories. The LIS profession generally uses theories derived from other disciplines. Ngulube (2017:11) states that different people may use a theory to explain different aspects of a phenomenon, and that no one theoretical position can explain all of social reality.

The study adopted the theory of Circumscription and Compromise introduced by Linda Gottfredson (1981, 1996) as the most appropriate theory for the investigation. The Circumscription and Compromise theory focuses on the career development processes of individuals from childhood to adulthood (Brott, 1993:1). The theory also emphasises the development of an individual's opinions of the career choices accessible (Gottfredson, 2002:1). Hesketh, Elmslie, and Kaldor (1990:84) state that Gottfredson's theory is one of the major theories on professional development. The Circumscription and Compromise investigates motivating factors for choosing certain careers. This study investigated factors affecting LIS educational programme choices, a phenomenon that is not different from other careers, hence the choice of this theory. The theory is discussed in the following subsection

2.2 Theoretical framework

A theoretical framework is the application of the theory or set of concepts drawn from the same theory to explain an event, or shed some light on a research problem (Imenda, 2014:189). Green (2014:2) defines a theory as an organised set of interrelated concepts that specify the nature of relationships in variables. In the author's view, a theoretical framework refers to the theory or model that a researcher chooses to guide his/her research study. The theoretical framework is the foundation of the research study (Grant and Osanloo, 2014:12; Imenda, 2014:194). Theoretical frameworks serve as the guides that support the study and provide the structure to define how one

will approach the research as a whole (Grant and Osanloo, 2014:16). The theoretical framework must be available to help the researcher to achieve the research goal (Green, 2014:35). Frankfort-Nachmias and Nachmias (1996:41) state that there are four levels of theory: the theoretical system, conceptual framework, taxonomies and the *ad hoc* classification systems. Each theory serves a different purpose. Selecting an appropriate theoretical framework for a study is an important and necessary process (Grant and Osanloo, 2014:17). Hence, it is inconceivable to conduct research without a theoretical framework (Ngulube, 2017:1). Furthermore, the theoretical framework should only be part of the research when it is appropriate for the investigation and the research questions. The theory should line up with the research questions. In addition, Ocholla and Le Roux (2011:7) opine that a theoretical framework can be located at the beginning of the dissertation in Chapter One, in the literature review or in its own chapter. In this study, the theory has its own chapter. The selected theory offers a conceptual basis for understanding, analysing and designing ways to investigate the research problem of the study. As indicated earlier, the study adopted the Circumscription and Compromise theory formulated by Gottfredson (1981, 1996).

2.3 The Circumscription and Compromise theory (Gottfredson, 1981, 1996)

Gottfredson developed the theory of Circumscription and Compromise in 1981 and revised it in 1996 (Gottfredson, 2002:86). The Circumscription and Compromise theory focuses on how the youth slowly recognise a variety of professional choices provided by the society around them (Gottfredson, 2005:2). It explains how individuals make professional decisions during their development process. The Circumscription and Compromise theory focuses on the development of an individual's understanding of occupational choices. Ivers, Milson, and Newsome (2011: 232) mention that the Circumscription and Compromise theory is a career development theory, which clarifies the occupation processes of young people which they formulate from their early stage. It is about the vocational goal processes of young people from their early stages to higher education levels (Brott, 1993: 2). The theory is concerned with the process whereby people circumscribe and compromise their vacation decisions (Brown, 2002:86). It explains that individuals sacrifice their individuality in order to meet employment desires.

The theory assumes that people build maps of careers by picking up career stereotypes from their surroundings (Gottfredson, 2002:1). The theory stipulates that those careers are clustered on the map using occupational prestige level, sex-type and field of work (Gottfredson, 2002). Individuals construct the map with a list of career decisions to choose which career is satisfactory and fits with their identity and which does not. Distinct occupations tend to cluster in various parts of the psychological guide (Brown, 2002:99). People also create images of occupations, including the personalities of people in those occupations from the created images. Common images are grouped in a meaningful manner (Gottfredson, 2002:89). Individuals identify the career they prefer by assessing the compatibility of different careers with their images. The Circumscription and Compromise theory proposed four principles that the theory believes govern career compromise in young people. Individuals only consider professions inside a territory limited by their worthy sex-type and status.

The reason for the theory was to help individuals prevent and reverse unnecessary constriction in their beginning periods of career development; hence, in the present day, selecting a career is both a choice and a responsibility (Gottfredson, 2002). The theory describes the vocational development class and sex differences with specific regard to the difficulties that are usually faced by people. As indicated by Gottfredson, (2002: 87), people have an image of the occupation called occupational stereotypes. It includes the nature of the work as well as the personality of the person and the suitability of that career for different types of people. Normal images are organised into meaningful and shared cognitive map occupations. It shares a rationale for an individual's career directions. According to Gottfredson (1981, 1996, 2002, 2004), career development is a procedure that requires a high level of psychological capacity, a person's capacity to sort out and synthesise professional information. Leung (2008: 121) states that it responds to external realities and constraints such as monetary misery, the labour market and unreasonable employment practices. It states that one needs to oblige their vocational inclinations to avoid unnecessary compromise. Lent, Brown and Hackett (2002:86) state that individuals should evaluate the openness of the profession while picking which career to pursue because there are various barriers that can stand in the way of an individual's career. The main concepts of the theory are discussed in the next subsection.

2.4 The Circumscription and Compromise processes

The circumscription is the component of the theory that focuses on the range of career alternatives during individuals' career development process from one's youth to adolescent stages (Hesketh, Elmslie and Kaldor, 1990: 49). The compromise component of the theory describes various factors faced by a person when implementing a career. The Circumscription and Compromise theory highlights the fact that the majority of young people unnecessarily compromise or give up on their preferred choices by avoiding confronting outside reality. For example, lack of knowledge of a specific career, financial issues, accessibility of occupation, training and other factors. As indicated in the theory of Circumscription and Compromise, people of various sexes and backgrounds tend to aspire to careers that are typical of what one perceives as the best occupational aspiration (Hesketh, Elmslie and Kaldor, 1990:137). This shows that many young people are influenced by outer generalisations. The theory distinguishes four key constructs that directly determine the career development of young people. According to the Circumscription and Compromise theory, four formative processes guide individuals in their job-matching process. These processes happen amid the initial two decades of a person's life. The processes are cognitive growth, self-creation, circumscription, and compromise

2.4.1 The Circumscription processes

The first process is the circumscription stage (Gottfredson, 2002). The circumscription involves rejecting incompatible occupations. According to Gottfredson (1981, 1996), the circumscription process occurs when individuals eliminate unacceptable careers from the range of career possibilities. Blanchard and Lichtenberg (2003:251) opine that circumscription is the process in which individuals are discounting unsuitable choices in the light of their apparent fit with ones suitable for them. Circumscription is the process by which a person rejects alternatives they deem unacceptable (Gottfredson, 2002:100). Blanchard and Lichtenberg (2003:251) opine that circumscription is the process of excluding unsuitable careers from the variety of career possibilities. Our environment, genetic make-up and experiences frame a circumscription process in which one eliminates occupational alternatives that conflict with our self-concept. There are four phases of circumscription. The stages are orientation to size and power (first stage), which happens between the ages of three to five. The second stage is orientation to sex and roles, which happens between the ages of six to eight. The third stage is orientation to social evaluation which

happens at ages nine to thirteen and the last stage is orientation to the internal, unique-self which happens at age fourteen and above.

First stage : orientation to size and power (three to five)

The first stage begins between the ages of three to five, when professions are viewed as adults' roles by classifying things as weak and strong. Gottfredson (2002) pointed out that at this stage, children become aware of adults' roles. They realise that they will eventually become adults and take on roles for themselves. A child knows what they want to be as a grown-up (Gottfredson, 2002:96). Power and size mainly influence decisions at this stage. At this stage, a child observes careers as roles taken by adults (Sharma, 2016:221).

Second stage : orientation to sex and roles (six to eight)

The second stage begins at six and lasts to eight years of age. At this stage, the child starts to categorise the world with simple concrete distinctions (Gottfredson, 2002). The stage is described by an orientation to sex roles. At this age, children have progressed to making simple dissimilarities among jobs. One starts to eliminate careers that seem not to match their gender and self-concept (Gottfredson, 2002). One makes qualifications depending on expansive sexual orientation classifications.

Third stage : orientation to social evaluation (nine to thirteen)

The third stage begins at the age of nine and lasts until thirteen years. The third stage is characterised by an orientation to social valuation. In this stage, individuals are aware of differences in social status. They make comparisons between occupations that help one to get higher level jobs. Individuals eliminate all occupations that seem out of reach in terms of the effort required and ability. Some of the careers may not be wise, but they tend to be permanent unless challenged in some way. We have started to conceptualise employment as theoretical accumulations of exercise and appoint a social incentive to those occupations. One comprehends salary, status, and exertion and adjusts his/her goals as needs be (Gottfredson, 2002).

Fourth stage : orientation to internal, unique self (fourteen and above)

The orientation to a unique, internal self begins at the age of fourteen and above. In this stage, individuals form their preferred social selves. Individuals self-define the social space. One starts

to perceive how the assorted occupation covers various fields of work. Individuals can improve their vocation choice as indicated by their own advantages, objectives and qualities (Gottfredson, 2002). While one has previously eliminated unacceptable alternatives, now they seek roles that are compatible with their personal, psychological selves. Individuals replace idealistic aspirations with realistic aspirations based on what are perceived as accessible options aligned with who they believe themselves to be (Gottfredson, 2002).

2.4.2 The Compromise process

The compromise process follows circumscription. Gottfredson (1981) defined the term compromise as the way towards relinquishing one's optimal inclination to suit one's outside component. At this stage, a person can be motivated to sacrifice roles that seem to be more compatible with their self-concept (Gottfredson, 2002). Gottfredson and Lapan (1997) pointed out that compromise is a major choice when individuals are faced with the implementation of career choices with unacceptable prestige, sex-type and inherent interest. The compromise concept explains that young people compromise their field of interest when needed in favour of those that are easily accessible (Brott, 1993:4). The individual's lack of helpful social connections, lack of knowledge about how to access certain roles and lack of information can lead to career compromise (Gottfredson, 2002:100). Compromise takes place when evaluating the availability of a career choice, and perceptions of barriers that render that choice inaccessible (Tsaousides and Jome, 2008: 187). People abandon their underlying inclinations for less desirable yet more achievable alternative that is compromise. When considering a preferred occupational choice, individuals may encounter barriers that would hinder them from accomplishing that goal successfully. According to Tsaousides and Jome (2008:1) career compromise happens when uncontrollable factors and life events happen. These are events such as family commitments, one's need for further training, money-related limitations and low occupation accessibility. Sinclair, Carlsson, and Bjorklund (2014:2) pointed out that individuals also focus on the possibility that the fear of losing surroundings can motivate individuals to make a career compromise. This happens because individuals are restricted by their lack of knowledge about how to access certain roles and appropriate tactics and the lack of helpful social connections.

However, not all apparently appropriate occupation choices are accessible, that is the reason individuals regularly compromise. Individual career accessibility is limited by labour market

conditions and numerous factors over which the individual has no control. The theory conceives that people will settle on work in an alternative field within their social space and compromise either sex-type or prestige of work. However, individuals can limit the cost and the effort of locating current opportunities for education, training, and employment. Individuals increase the accessibility of their preferred options when they look for information more widely and in a timely manner, are more persistent and optimistic, and find a way to take steps to increase their competitiveness for available opportunities.

Gottfredson (2002) suggested that, because of insufficient knowledge about the accessibility of preferred career choices and perceived barriers to those identity careers, it could lead to compromise. When individuals finally settle on an occupation, it is because the option chosen is regarded as the most satisfactory (Gottfredson, 1981). Lee, Lawson and McHale (2015:1) opine that people tend to make profession related decisions that match their skill and interests. There are four principles that govern compromise. The first stresses the relative importance of prestige, sex-type and interests (Gottfredson, 1996). The second expresses that individuals will settle for a good choice rather than pursuing the optional choices. The third principle expresses that if one is not satisfied, they are unwilling to commit to career alternatives; instead, they will defer decision-making until the career is worthwhile and good. The last principle of the theory focuses on the mental settlement to compromise. It expresses that a person will more easily accommodate a compromise of interest than of prestige (Blanchard and Lichtenberg, 2003:252).

The theory suggests that when individuals compromise careers, they would sacrifice their interests before they sacrifice prestige, and they eliminate prestige before they sacrifice the sex-type of the job. Gottfredson (1981) postulated that individuals' sexual orientation is the most well protected aspect of one's self-concept. Therefore, sex-type is the least likely to be relinquished when making an occupational decision (Blanchard and Lichtenberg, 2003: 252). As indicated in Gottfredson (1981), sex-type is more essential than prestige, and career prestige is more important than the interest in career choice (Hesketh, Elmslie and Kaldor, 1990:49).

2.4.3 Cognitive growth

Cognitive growth is concerned with the individual's thinking capacity. A person can comprehend and break down bodies of information (Gottfredson, 1981). Cognitive growth is instrumental to

the development of a cognitive map of occupation and conceptions of self that are used to evaluate the appropriateness of various professional alternatives (Sharma, 2016:220). Most young people have the same perceptions of the work that adults do. They make a subjective guide to careers, which organises professions as indicated by prestige level and sex-type. Prestige refers to occupations' status level. Gottfredson (2002) refers to prestige as the connotation of occupational status level and the overall desirability of individuals. Prestige studies generally ask people to rank or rate occupations according to their general desirability (Gottfredson, 1981:550). The occupation prestige hierarchy is also a ladder of demands for intelligence on the job (Gottfredson, 2002:88). Sex-type refers to the masculinity and femininity of individuals. According to Gottfredson, (1981:550) sex-type studies examine perceptions of how suitable different occupations are for women and men. Hornby (1948: 1353) states that sex-type is the process of putting people into categories according to what one considers typical of or suited to each sex. Prestige is the respect and admiration that something or somebody has because of their position (Hornby, 1948:1159).

2.4.4 Self-creation

The self-creation process is the improvement of peoples' self-image (Gottfredson, 1981). Gottfredson (1981) believes that human genes do not stamp individual personalities with interests, other traits, or natural factors; rather people's characteristics are created by their experience and general surroundings. Hence, an individual is purportedly shaped by their surroundings. Every individual is exceptional because of the genotypes and the individual conditions that shape that individual as well as individual encounter. The person's inner hereditary compass is the center of our independence. That makes young people gain greater control over their lives as they develop, because one is more dynamic on his or her own. The activities that would create, exercise, and consolidate these groups as distinct vocational interests are not accessible to individuals of any age in all situations. Gottfredson (1981) supposes that the majority of young people lack sufficient knowledge to know what their career interests are or might be; many of them are less able to recognise ill-fitting expectations and circumstances.

2.5 Other concepts found in the theory

Gottfredson used the following concepts to explain the compromise and circumscription processes cognitive map of occupations; occupational images; occupational preferences; perceived

accessibility of an occupation; occupation aspiration and occupation alternative. The concepts are briefly explained in the following subsection.

2.5.1. Cognitive map of occupations

According to the Circumscription and Compromise theory, individuals usually have detailed images of some careers and they judge those careers amongst other vocations using dimensions such as sex-type, the field of work and the level of work. The cognitive map assists people to organise one's image of various occupations (Gottfredson, 1981:547).

2.5.2. Occupational image

The term occupational image is a speculation and generalisation made by a group of people about a specific career. The term corresponds to the term occupational stereotype (Gottfredson, 1981: 547). The theory has used the term occupational image rather than occupational stereotype because it believes that it is saturated with negative implications. The occupational image includes the personalities of employees in those jobs, the rewards, state of the job, the kind of work they do and the type of lives they lead (Gottfredson, 1981:547).

2.5.3. Occupational preferences

The occupational preference is the result of individuals' assessment of the compatibility of occupations with their self-concept and how much effort they are willing to exert to enter into those occupations and who they like to be in those occupations. People tend to consider occupations which are exceptionally good and they will be profoundly suited to one's feelings of self. A career which is highly incompatible will be strongly disliked (Gottfredson, 1981:547).

2.5.4. Perceived accessibility of an occupation

In the theory, Gottfredson (1981) states that not all occupations that are compatible with self - concept can be accessible. One might be positively disposed to an occupation but then find it difficult to reach. Inaccessibility of the career can refer to a lack of knowledge on how to enter that occupation. Opportunities in the economic environment can affect a person's chance of getting into a particular career. The judgment of accessibility to occupations is based on different elements like the accessibility of the job within the surrounding geographic area, perception of discrimination and ease of obtaining training access (preparing for the job). The occupation's availability is somewhat similar to "realism" (Gottfredson, 1981: 458). Job accessibility refers to

how much professions are accessible and realistic (Tsaousides and Jome, 2008: 187). Therefore, the perception of occupational accessibility determines whether the implementation of a career choice is possible.

2.5.5. Occupation aspiration

An occupational aspiration is defined as a vocation considered by a person's best option at any given time as the perceptions of similarity and availability change (Gottfredson, 1981:548). As indicated by Blanchard and Lichtenberg (2003:251), when a person abandons their initial preference for less wanted yet more achievable options.

2.5.6. Occupational alternative

The choice of satisfactory occupational alternatives narrows with each stage of development (Blanchard and Lichtenberg, 2003:251). Gottfredson used the circumscription term to describe occupational exploration as a process of eliminating occupational choice (Brott, 1993:3). When external barriers occur, individuals re-evaluate their choices and replace them with less desirable but more feasible ones. For instance, when somebody first wants to become a legal advisor, they could seek a profession in another field; when one cannot find it in their area of choice, they find alternatives (Tsaousides and Jome, 2008: 187).

2.6 Studies that have applied the circumscription and compromise theory

There is a scarcity in LIS of previous studies that have used the Circumscription and Compromise theory on students' perception of their career choices. However, there are studies that have used the theory in other investigations. For example, Blanchard and Lichtenberg (2003) tested and revised the theory of Circumscription and Compromise. The study indicated that the relative significance of sex-type, prestige, and interests relies on the level of compromise with which an individual is confronted. Blanchard and Lichtenberg (2003) opine that if the degree of compromise is low, then interest will be most protected, followed by prestige and then sex-type.

Hesketh, Elmslie and Kaldor (1990:50) made a direct measure of the importance of sex-type, interests and prestige. Their study discovered that interests were more essential than prestige and sex-type. However, their data failed to support the circumscription and compromise predictions

that sex-type would be more significant than prestige (Hesketh, Elmslie and Kaldor, 1990:52). Hesketh, Elmslie and Kaldor (1990:49) state that the Circumscription and Compromise theory is important for many reasons. It deals with the compromise component that is a process in which individuals are faced with the difficulties of seeking a perfect profession. The theory also tries to incorporate essential elements of a person's social character. Elmslie and Kaldor (1990) further state that the theory also explains why it is difficult to urge women to enter non-traditional careers. However, the significant part of the theory is in terms of its suggestions for the approaches taken to encourage young people to enrol in non-conventional careers. Tsousides and Jome (2008) applied the Circumscription and Compromise theory and discovered that the magnitude of career compromise affects positive and negative emotional states as well as the work-related satisfaction of individuals. McLelland (2008) investigated factors to consider in prioritising or compromising future career paths in the case of emerging young adult couples.

2.7 Criticism of the theory

One of the criticisms of the theory is that it neglects adults' career development but focuses on children and adolescent youth. The theory fails to discuss adults' career development because not all young people create career goals in their early years. McLelland (2008) is of the view that career choices can occur at any stage in life, from adolescence to young adulthood. Brott (1993:5) believes that a number of researchers have examined the circumscription and compromise and that their findings were mixed. Brott (1993:7) states that a variety of assumptions need to be tested based on the compromise and circumscription theory to examine how these two concepts relate to making career decisions. Blanchard and Lichtenberg (2003:252) indicate that Gottfredson (1996) failed to characterise what constitutes a low, moderate or high degree of compromise. She suggested that the minor compromise involves choosing a career among acceptable alternatives and the major compromise involves choosing among unacceptable occupational alternatives. On the other hand, Leung (2008: 125; and also, Sharma, 2016:221) believes that Gottfredson's theory of circumscription and compromise offers a unique perspective to career guides everywhere throughout the world. This study considered these criticisms, but found them sufficiently serious to compromise the study. It was also noted that the theory targets mainly young adults, which is appropriate for university entrants.

2.8 The relevance of the circumscription and compromise process in this study

The Circumscription and Compromise theory guides the study. Two main constructs of the theory are applicable to the study, namely circumscription and compromise. The study also adopted the following concepts: occupational aspirations and occupational alternatives; perceived accessibility of an occupation, occupational preferences and occupational images. The study assumes that students enrol for LIS because of circumscription and/or compromise. That is, they enrol because they want to or because they have no other choice but to enrol in LIS. Newbutt and Sen (2009:10) state that the misconceptions of LIS and an absence of knowledge of the profession results in individuals not being interested in pursuing an LIS career. Moniarou-Papaconstantinou, Vassilakaki and Tsatsaroni (2015:585) state that all the careers mentioned compromised factors provided in the theory, which provides a setting to investigate whether there is a shift regarding the factors affecting LIS choice and whether the individuals' choices are related to their educational and social background. Hence, this study investigates LIS students' career perceptions.

The theory states that the majority of young people lack sufficient experience to know what their career interest is or might be at an early stage; many of them are less able to recognise their qualities at an early stage. Therefore, Amekuedee (2010: 317) states that many students usually develop a love for LIS and after some time; that is, after enrolment. Ismail (2006) states that there is a need to know how students perceive the LIS programme and its career opportunities. Since the students' career decision, to follow a particular professional path, can be influenced by their attitude towards that profession (Farrington, Gray and Sharp, 2011: 2). However, Kaba (2017:513) states that employment is an important indicator for choosing LIS. Therefore, the circumscription and compromise theory helped to investigate such concerns.

2.9 Summary

This chapter has discussed the theoretical framework and the relevance of the theory in this study. The theory reveals that students can also make a compromise in their career choice because of different uncontrollable internal and external factors. According to the theory, when people are forced to compromise their career choices, they are more likely to compromise on the field of work first, then on a social level, and finally on sex type. Individuals usually typically work in a situation

that fits their identity and self-concept. The theory explains why young people do not typically consider certain professions early in their career planning. One of the study's criticisms is that the theory has used a unique approach to the career development process. In this study, both processes were applied to complement the study data.

The next chapter reviews literature on LIS education, career opportunities, the job market, students' reasons for choosing LIS studies and careers, students' perceptions of LIS, challenges in LIS and Marketing.

CHAPTER THREE: LITERATURE REVIEW

3.1 Introduction

This chapter discusses the relevant subject literature. The literature review is a separate chapter in the research report in which the researcher synthesises the literature on the topic and engages critically with it (Henning, Van Ransburg and Smith, 2004:27). The literature review is a selection of documents, published and unpublished, on the topic which contains information, ideas, data and evidence written from specific standpoints to fulfil certain perceptive on the idea of the subject and how it is to be explored, and the effective assessment of these documents in relation to the research being proposed (Hart,2007:13). The literature reviewed in this study is aligned to the research question and the problem statement identified by the research. The chapter is discussed based on the following topics: Library and Information Science (LIS) education, career opportunities in LIS, LIS students' reasons for choosing the profession as their future career and the factors which influenced them to choose the profession, student's perceptions of LIS, challenges in LIS and the marketing of the LIS profession.

The development of career perceptions has changed drastically over the past 20 years (Wang and Haung, 2014:211). One should not deny the importance of understanding students' perceptions of their profession and career opportunities. Students are able to see clearly gaps between what they are learning in the classroom and what will be expected in the workplace (Cherry *et al.*, 2011:129). Individuals learn more about their chosen profession over the course of their studies. However, the education in LIS has a wealth of research, but limited published studies of students' perceptions of their programmes and their career opportunities (Aharony, 2006). A number of studies have

been conducted on LIS education (Yadav and Bankar, 2016). Nevertheless, most of these studies have focused on the LIS curriculum, job requirements, librarians' perceptions and librarian's job satisfaction, rather than why students choose to study LIS in the first place. Mansourian (2010:187) pointed out that little research has been done on LIS students' perceptions of their programme and how they see their subject as a future career. Cherry *et al.* (2011:121) further state that it is essential to gain a better understanding of how students perceive the LIS profession. Jones (2008:17) claims that, if the inspirations for choosing LIS are known, the profession will be able to develop recruitment campaigns based on those results. Jones (2008) additionally states that in the past such strategies have been effectively used.

3.2 Library and Information Science education

Changes in LIS schools across the world have occurred in the past decade or two. LIS education has experienced essential changes in all its parts (Abubakar and Abbas, 2014:8). These changes have an impact on African LIS schools (Jain and Jorosi, 2017:1). Education for a 21st century librarian continues to face many of the uneasy tensions that have been present since its beginnings in the 19th century. Mambo (2000: 1) states that the demand for LIS professionals in Africa has been rising over recent years. In 2007, Ocholla and Bothma (2007) were of the view that the enrolment of students in LIS has declined in most LIS schools in Africa. The decline of enrolment by LIS students was caused by limited career opportunities in libraries (Ocholla and Bothma, 2007; Okello-Obura and Kigongo-Bukenya, 2011). Another reason for the decline was that the boundaries of the programme were still not defined and society in general has misconceptions about the nature of LIS studies (Mambo, 2000). Marcella and Baxter (2001) stated that the LIS profession is demanding in this current and challenging digital environment. On the contrary, Rakwaro and Bii (2016:11) point out that LIS education in Kenya has witnessed an increase in the number of students admitted to the programme. For this reason, Marcella and Baxter (2001) concur, adding that there are different career opportunities that have opened up for LIS professionals both in globalisation and a broad-based network.

3.2.1 LIS Education in South Africa: an overview

There are twenty-six universities in South Africa, twelve of which have Library and Information Science schools or Information Studies schools (Ocholla and Ocholla, 2014:2). The schools have

different names. They are: Durban University of Technology (DUT) – Department of Information and Corporate Management; University of Kwa-Zulu Natal (UKZN) – Information Studies Programme; University of Fort Hare (UFH) – Department of Library and Information Science; University of Pretoria (UP) – Department of Information Science; University of Johannesburg (UJ) – Department of Information and Knowledge Management; University of Zululand (UZ) – Department of Information Studies; University of Cape Town (UCT) – Library and Information Studies Centre; University of South Africa (UNISA) – Department of Information Science; University of Stellenbosch (SU) – Department of Information and Knowledge Management; University of the Western Cape (UWC) – Department of Library and Information Science; Walter Sisulu University (WSU) – Department of Library and Information Science and the University of Limpopo (UL) – Department of Communication, Information and Media Studies (Information Studies programmes belong here) (Ocholla and Ocholla, 2014:2). South Africa has the best LIS schools on the African continent; a majority of them have experienced serious quality checks where quality and not quantity is used to benchmark them (Otiike, 2017:70). However, Nigeria has the largest number of library schools on the African continent, followed by South Africa (Otiike, 2017). In South Africa, LIS education programmes started in 1933 when the professional South Africa Library Association (SALA) introduced training courses for librarians (Musiker, 1986:1, cited in Raju, 2013:74).

The South Africa Library Association had followed the British model of offering librarianship courses. The University of Pretoria became the first University to offer Library and Information Science courses in 1933, and was followed by the University of Cape Town. In 1955 the University of South Africa began distance education for Library Science professionals. In 1962, the professional association migrated the correspondence courses to the University of South Africa. The need for LIS education programmes in South Africa originated from university, college and public libraries (Otiike, 2017:73). However, LIS programmes in South Africa vary from one university to the other (Rakwaro and Bii, 2016:13). Hossam (2009:1) states that in American LIS schools, the programme also varies from each LIS school to the next. Each LIS school has its unique entrance requirements to enrol in the programme as well as the programme's curriculum. Egunjobi, Salisu, and Ogunkeye (2014: 297) state that in Nigeria an entry requirement for undergraduate studies into LIS is not limiting; it's a combination of different subjects (Egunjobi, Salisu, and Ogunkeye, 2014: 297).

Various models of study for LIS qualifications exist (Rakwaro and Bii, 2016:13). According to Ocholla and Bothma (2007), in the year 2007 South Africa had two main learning models. LIS schools offered a full range of study programmes from an undergraduate course to doctoral level (PhD). There was also the undergraduate model and the post-graduate diploma model. The undergraduate model takes three to four years of study in which topics from the broader field of Library and Information Science combined with several compulsory or elective courses from other disciplines are taught. The undergraduate courses in all departments are a diploma course and a bachelor's degree. According to the DUT handbook (2018), the Diploma in Library and Information Studies programme is a three-year diploma qualification. However, the Bachelor of Library and Information Science is a four-year degree qualification. The undergraduate degree is then followed by one year of honours degree study, during which students specialise in topics in Library and Information Science. For post-graduate studies, students are normally required to obtain any general degree as an entrance requirement for the postgraduate diploma in LIS. The postgraduate diploma is then followed by an honours degree (Ocholla and Bothma, 2007). The four-year LIS degree course leads directly to the master's programme, whereas the master's programme is followed by a doctoral programme (www.lis.uzulu).

3.3 Career opportunities in LIS

The LIS profession provides a variety of employment opportunities (Neelamma, Gavisiddappa and Kulkarni, 2016). Nowadays, there are a number of career prospects in librarianship. Career opportunities for LIS graduates are expanding beyond libraries (Fraser-Arnott, 2016:132). According to Ullah (2014), the LIS profession is rapidly growing and is a multidisciplinary and interdisciplinary field. In this rapidly changing world, the technological development and information era, it is perceived that the LIS job market is changing in terms of technical skills, experience, and qualification requirements (Shongwe, 2014; Yadav and Bankar, 2016:1). Shahbazi, Fahimnia, and Khashemehr (2016:71) observe that there are many careers in LIS. The opportunities in LIS are plenty but largely unrecognised (Sawant and Sawant, 2018). A trained LIS graduate can find opportunities for employment in information centres and libraries (Tella and Issa, 2013). Baruchson-Arbib and Bronstein (2002:397) stated that it is vital to emphasise skills and competences that are needed in the profession. Therefore, LIS graduates are now expected to

have library skills and be able to apply information technology (IT) knowledge effectively (Shongwe, 2014; Yadav and Bankar, 2016:1). Nowadays, libraries are seeking graduates who are IT proficient in accordance with the idea of libraries without walls (Otiike, 2017:73). Therefore, LIS professionals should be innovative in order to meet the challenge of creating the visibility of LIS services (Ameen, 2011:175). It is essential for an organisation to encourage creativity and innovation (Hamid and Soroya, 2017:83).

There are jobs created by new technologies which did not exist in the past (Fraser-Arnott, 2016). Technology has changed library operations as well as the information profession environments (Aharony, 2006:238; Baruchson-Arbib and Mendelovitz, 2004:82; Shongwe, 2014). These changes are mainly a reflection of the combination with other information related disciplines (Rakwaro and Bii, 2016:13). However, the development of IT is not regarded as a threat to the LIS field. It has provided new career positions and titles. Traditional librarian careers are not eradicated and we can still see a great number of these categories of careers such as “cataloguing librarian, reference librarian” (Mansourian, 2010; Ocholla and Shongwe, 2014). Baruchson-Arbib and Bronstein (2002) argue that the traditional roles of libraries, cataloguing, preserving and classifying library materials, are undergoing a transformation that has constantly changed. Cherry *et al.*, (2011) has the same sentiments and states that the present librarian is not only retained in classification and cataloguing and expecting the physical patron to ask for assistance. LIS career opportunities have spread out of the libraries to information centres. It has been transformed into an industry that organises and processes information and knowledge (Baruchson-Arbib and Bronstein, 2002).

The current information age has presented new opportunities for LIS professionals to acquire new roles and also to pursue new jobs beyond the library environment. Baruchson-Arbib and Bronstein (2002:399) pointed out that there are many new jobs specialising in information and they are cooperating with information centres and libraries. LIS alumni are needed to fill new positions in other information related fields such as knowledge management and information architecture (Cherry *et al.*, 2011:120). Rakwaro and Bii (2016:13) opine that most LIS schools incorporate information related fields such as archive and record management, IT, publishing, media, and knowledge management. The rapid technological advance has lifted the profession in such a way that workers are no longer limited only to “four walls” of a library; hence the technological platform has improved the role of librarians. Afolabi (1994) stated that it is crucial for both students

and lecturers to recognise careers which are related to the LIS profession so that graduates can practise what they have learned and hopefully minimise the problem of unemployment. Therefore, it is appropriate to investigate how students of Library and Information Science respond to the changes in the profession (Baruchson-Arbib and Mendelovitz, 2004:83). However, Lo *et al.*, (2015:211) argued that designing LIS educational programmes for the diverse expectations of employers could be difficult, because the LIS programmes also have to compete with other programmes like IT management and information systems to recruit applicants and they have been forced to review its curriculum scope. Lo *et al.*, (2015) further state that LIS employers of graduates are highly diversified and vary substantially in both nature and size. Yadav and Bankar (2016) also note that there is always a strong need to identify employer's expectations from LIS graduates in the field. New jobs are developing and old jobs are being transformed within the LIS profession (Crosby, 2000). Companies are increasingly recognising that information professionals have outstanding skills. It has led to a demand for librarians in special libraries (Dolan and Schumacher, 1997).

3.4 An overview of the LIS job market

The future job market is promising for those professionals who are competent enough to utilise IT for library activities (Ameen, 2010:179). This includes jobs that were created by new technologies and not previously marketed to LIS graduates (Fraser-Arnott, 2016:132). Funmilayo (2015:21) states that the demand for LIS professionals is changing each day. Ameen (2011) additionally opines that there are a developing number of employment opportunities following the growth of educational institutions in private and public sectors and increasing demand for digital information services.

Yadava and Bankarb (2016) carried out a study to examine the trends and job market demands of employment opportunities in Library and Information Science in India, where they analysed all career advertisements published in the *Times of India* newspaper. The study revealed that LIS schools need to revise their curriculum to meet the current employers' job requirements. Mansourian (2010) carried out a study on the impact of IT on the LIS job market and the development of new career opportunities. The findings demonstrated that the emergence of IT has a positive impact on the job market of LIS. In South Africa, Ocholla and Shongwe (2013) have

noted that having IT skills was considered to be an important element in finding a suitable job for LIS graduates. However, Mansourian (2011) argued that the traditional jobs are not affected by the job market and by the emerging of new positions. Goodsett and Koziura (2016) opine that the current LIS job market requires graduates with work experience.

Shahbazi, Fahimnia and Khoshemehr's (2016) findings show that the following job classes, namely digital librarian, IT librarian, digital archivist and metadata librarian were the most advertised IT -based jobs. The authors concluded that LIS schools should not focus only on humanities. Ocholla and Shongwe (2013) pointed out that the public sector is the main employer of LIS professionals, more than the private sector. Aghauche, Anyaegbu and Madubueze (2015:1) also note that library operations are becoming highly sophisticated and complex due to the information explosion as well technological development. Greer, Grover, and Fowler (2007) state that information professionals and library science professionals have extensive responsibilities; some of the positions are specialised. For example, information professionals may be called librarians, information specialists, researchers, archivists; information entrepreneurs and information brokers. Some of the information specialists are law librarians, acquisition librarians, cataloguers, reference librarians, music librarians and research specialists. LIS graduates can work as librarians, assistant librarians, library and information officers, directors of libraries, information executives, information officers, documentation officers, information analysts and knowledge managers (Jaiswal, 2012).

3.5 LIS students' reasons for choosing or rejecting LIS studies and careers

Professional entry into higher education is a difficult process for many young people. Farrington, Gray and Sharp (2011:2) state that a student's career decision to follow a particular professional path is influenced by their attitude towards that profession, which in turn is influenced by their beliefs or perceptions of whether the experience would be desirable or not if they chose that particular career path. Aharony (2006:238) states that students' perceptions of libraries may be affected by historical and social factors. The unawareness of LIS courses among school leavers is a key factor responsible for its low frequency as first choice (Aghauche, Anyaegbu and

Madubueze, 2015:4).Genoni and Greeve (1997:301) carried out a study of “school leavers’ attitudes towards careers in librarianship” and concluded that the librarianship profession has negative images and certain levels of misconception among school-leavers. However, Egunjobi, Salisu and Ogunkeye (2014) conducted a study of undergraduate’s entry profiles and career choices of LIS in a Nigerian university of education. The findings show that the most prevalent influencing factor on undergraduates’ career choice was interest in the course.

In Nigeria, Issa and Nwalo (2008) conducted a survey of Nigerian Library and Information Science students and concluded that the most common reason for choosing LIS is prior work experience in libraries, while the second most common reason is job security. However, there are factors that could affect the mind-set of the new generation of LIS professionals (Singh and Chander, 2013:5). Another study in Nigeria by Aghauche, Anyaegbu and Madubueze (2015) observed that students in Nigeria apply to study in library schools only after they have been rejected by other university departments. There are few undergraduates that usually apply to study LIS as first choice (Aghauche, Anyaegbu and Madubueze, 2015). Issa and Nwalo (2008) found that students change from different courses to LIS or did not have the prerequisites for a desired course of study. Issa and Nwalo (2008) further state that some of the students are applying for enrolment even though they are not aware of the course while they are in high school (Aghauche, Anyaegbu and Madubueze, 2015). Their findings and observations contradict the results of Singh and Chander (2013:19) from India that discovered that a majority of respondents (69.3%) pick the course (LIS) as their primary profession, whereas less than a third (30.7%) of respondents had thought of making a career in different fields before LIS.

Issa and Nwalo (2008) discovered that the majority of students did not choose LIS as their first career choice. Their findings are supported by Aghauche, Anyaegbu and Madubueze (2015) who found that some students became aware of LIS courses while in primary school and others in high school. However, some came to know about the programme after failing to meet the entry requirements in their preferred fields at university. Issa and Nwalo (2008) concluded that the LIS profession is still unpopular among prospective undergraduates in Nigeria, compared to other programmes such as law, accounting, and health programmes.

There are various factors that influence peoples’ career choices (Egunjobi, Salisu and Ogunkeye, 2014). Among the many factors are the individual’s economic status, cultural influences, family

background as well as the knowledge of a particular profession. Moniarou-Papaconstantinou, Vassilakaki, and Tsatsaroni (2015) state that career choices in LIS are also shaped by a variety of factors. The most vital factor that influenced the enrolment of students in LIS profession is employment opportunities (Singh and Chander, 2013). Singh and Chander (2013) found that the majority of students had chosen a LIS profession because of the employment possibilities.

In South Africa, Shumba and Naong (2012) conducted a survey study on factors that influence medical students' career aspirations. The study findings showed that relatives, teachers, and students' self-image served to identify their preferred career choices significantly. However, in the study conducted by Pangcatan (2002), it was discovered that the majority of the respondents; parents and students were aware of the importance of the library and the LIS profession, but they were not aware of the career significance. Lo *et al.*, (2015:211) discovered that the most important factors that influenced many students in choosing a career in LIS were career advancement, being able to assist library patrons, job security, a stable work environment, intellectual development and career change.

Issa and Nwalo (2008) found that the majority of the respondents got to know LIS after failing to secure admission to their preferred programme at university. Baruchson-Arbib and Mendelovitz (2004:88) opine that the poor understanding of the course in schools was identified as a contributing reason for the lack of interest among students. Aghauche, Anyaegbu and Madubueze (2015) mentioned that the future of LIS is at a crossroads because of the growing anxiety arising from a situation where many students opting for LIS as a course of study do so only after failing to secure admission to other choice courses. A study from Ghana by Adanu and Amekuedee (2010) found that the majority of respondents had found the course useful. These findings are in line with the observation of Sen and Newbutt (2009:59).

Singh and Chander (2013) discovered that the majority of respondents joined the programme because of inspiration from their friends, families, guardians, relatives, teachers and librarians. These results are in line with the findings of Egunjobi, Salisu and Ogunkeye (2014) who found that parents and relatives had an insignificant role to play in the choice of career. Dali and Caidi (2016:500) conducted a study that revealed that individual's backgrounds did not seem to have an impact on the attractiveness of LIS.

3.6 Students' perceptions of Library and Information Science

This section is a review of the literature concerning students' perceptions of LIS programmes and careers. Having a substantial understanding of how students perceive the LIS profession can assist in recruiting new entrants to the field. Cherry *et al.*, (2011:121) state that understanding students' perception of LIS can lead to effective recruitment efforts and opportunities to improve the students' experience. Shaw (2010:555) states that an understanding of how the profession is perceived by the community can act as a stimulus for improving the promotion of a librarian's role and their services. Ard *et al.*, (2006) agrees and points out that, knowing the reasons of new librarians for choosing to pursue their career in LIS is crucial, because understanding the motivations behind their career selection will provide current librarians with a glimpse of the future of the profession. Studies have focused on the motivations for enrolling in the programme, the professional goals as well as the perceptions of the information professionals (Cherry *et al.*, 2011:121). Little attention has been paid by the researchers to LIS students' perceptions of LIS (Mansourian, 2010:186).

In South Africa no studies have been found on the students' perceptions of LIS programmes and career opportunities. Ard *et al.*, (2006:236) mentioned that understanding why students chose the library profession is vital. It may uncover the reasons why others are not selecting the course (Deeming and Chelin, 2001). Cherry, Freund and Duff (2013:175) posit that a greater understanding of students' perceptions can lead to more effective recruitment efforts, opportunities to improve and can enrich the student experience. Lo *et al.*, (2015:195) further state that by finding the reasons students enter the profession would enable LIS schools to better understand the desires and anticipations of the students.

Ard *et al.*, (2006) investigated "students' choice of LIS to discover their incentives for taking it as a career. These authors focused on students' views of the employment opportunities in the LIS field. The study found that some of the students had chosen LIS because there is a poor job market in their originally preferred profession. However, Madu Odenigbo and Tongs (2014) pointed out that LIS schools are failing to motivate students in the career choice of the LIS profession due to the shortage of staff in some of the schools. These findings concur with a study by Sen and Newbutt

(2009:59), who stated that the LIS profession has staffing problems and this is one of the reasons the profession continues failing to attract a sufficient number of young people to the course.

Singh and Chander (2013:20) found that the majority of respondents found LIS courses to be academically solid. Figyelo (2005) gives a comparison between final-year and first-year students of four LIS schools and discovered that students do not have clear ideas about the careers at the beginning of their studies. Mansourian (2010:186) shares similar sentiments and states that usually first-year undergraduate students initially do not have a clear understanding of their discipline. Students in the first-year of studies seem not to know the programme at all, thus the number of students that do not wish to become librarians is slightly higher.

Baruchson-Arbib and Mendelovitz (2004) conducted a study of Israeli Library and Information Science students' perceptions of their programme. The study taps into the attitudes and perceptions of students enrolled in LIS and found that the majority of LIS students believed that LIS and Information Science are related, but students perceive LIS as concerned with the everyday tasks of a library only, regarding the accessibility of library materials. These two disciplines are very closely related (Aharony, 2006:237).

Newbutt and Sen (2009:48) observed that young people have no idea of other information sectors and the information roles in their environment. They only know the school, academic, and public libraries. This lack of knowledge leads to lack of awareness of the LIS field. Young peoples' perceptions of what LIS entails may come from the common stereotypes of librarians (Newbutt and Sen 2009:48). Akbulut (2015:296) states that stereotypes are used by individuals to describe different things in particular in unfamiliar situations and can involve negative or positive beliefs. Sen and Newbutt (2009) asked respondents whether they knew anyone who was or has been a librarian. The purpose of this question was to determine any influence from knowing the individuals in a certain profession. The majority of respondents said they didn't know anyone, while the minority indicated yes. Sen and Newbutt (2009) concluded that the lack of knowledge of librarianship and awareness of its status as a professional career is an important factor that causes the course not to appeal to many young people. Therefore, the status of a profession has a strong impact on attracting new people (Alansari, 2011:575). LIS has lagged behind compared to highly visible professions such as law, engineering, education and others.

The public perception of a profession plays a vital role in recruiting new students (Alansari (2011). The status of LIS has been a major concern to librarians across the world (Mugot, 2012). The LIS profession and libraries have had a problem when it comes to public perceptions for a long period and the public image hasn't changed (Pert and Aparac-Jelusic, 2002:1). The misconception of librarians is applicable worldwide (Newbutt, 2008:17). The perception young people have of LIS may link to their personal interest in taking up the career (Newbutt, 2008). A study by Vassilakaki and Moniarou-Papaconstantinou (2016) found that library users have an overall positive image of librarian's status and the work they do. A recent study carried out by Kaba (2017) found that the majority of participants' perceptions toward LIS in the United Arab Emirates (UAE) appeared to be negative. Findings showed that many librarians have negative perceptions toward employment opportunities. The respondents believe that LIS graduates do not have employment opportunities, whereas a minority perceive that it is not difficult to get a job in LIS. However, Tella and Issa (2013:132) mentioned that the LIS field provides a variety of employment opportunities.

Another study, conducted by Chaputula (2014), found that the programme's name itself poses a problem in the sense that people think that an LIS graduates can be employed in a library environment only. Qualified professionals are employed in various information centres (Tella and Issa, 2013:132). Tella and Issa (2013) further state that it is imperative that LIS schools and students recognise careers related to the information profession enabling the graduates to practise what they learned and ideally limit the issue of unemployment.

In a recent study, Otiike (2017:4) posits that in Africa young people who happen to hold the future of the profession have no passion for the profession and gave the example that the newly qualified librarians do not like to be referred to as librarians. They regard the term as old-fashioned. They would be more contented with terms like information specialist, documentalists and information scientist. Aharony (2006:237) states that it is significant for LIS educators to know the perceptions of their students with regard to positions' names such as information specialist, librarian, and information scientist.

3.7 Challenges in Library and Information Science

There is a challenge in the field of LIS concerning the future of the profession (Baruchson-Arbib and Mendelovitz, 2004:82). Issa and Nwalo (2008:29) concur that future librarians are expected to explore and exploit the use of Information and Communication Technologies (ICT) for modern library practice. There are noticeable challenges in LIS that were highlighted by Jain and Jorosi (2017). Among the common challenges in LIS departments are that there is competition from new markets with the already existing LIS schools offering similar programmes. The implications of the changes in the LIS field are linked to the ways of working as well as the information sector (Simon and Taylor, 2011). New entrants' recruitment is one of the challenges. Hallam and Partridge (2005:2) share the same view, that it is a challenge for LIS education to attract more students to the programme and ensure that their expectations are met by providing an inspiring and progressive course. Aghauche, Anyaegbu and Madubueze (2015:1) are of the view that it is vital to educate new entrants in any profession to build up the profession. The profession is currently failing to meet the present and future anticipated needs of information experts. The professionals should be innovative in order to meet the challenge of increasing the visibility of library services (Ameen, 2010:175). Ameen (2011) concluded that LIS in developing countries is being significantly affected by ICT. Shahbazi, Fahimnia and Khoshemehr (2016:60) state that all LIS organisers around the world had better plan for opportunities provided by IT to prevent these job opportunities from turning into threats.

3.8 Marketing of Library and Information Science

Different suggestions have been made about how to recruit new entrants to the profession. Suggestions are that young people should be introduced into the profession by encouraging them to pursue their studies in LIS and creating displays to attract the youth (Alansari, 2011:577). Otiike (2017:74) opines that the future relies upon on the way the LIS profession is marketed. That is why there is a need to create career awareness of LIS to attract individuals who can meet current challenges (Singh and Chander, 2013). The promotion of LIS services is imperative in a society that has not traditionally been oriented towards a library as a valuable social institution (Aparac-Jelusic, 2002:4). It is important that students understand that there is a difference in terms of librarianship qualifications, duties, and income (Genoni and Greeve, 1997:302). A sustained and

adequate publicity is required especially among young people (Aghauche, Anyaegbu and Madubueze, 2014). Vassilakaki and Moniarou-Papaconstantinou (2014) stated that LIS professionals should promote the profession and their presence to the public to emphasise the importance of the role and responsibilities of librarians in delivering high-quality information services. Otike (2017:73) states that LIS programmes have become ever more complex. Thus, there is a need for every professional to develop strategies to make their profession as appealing and rewarding as possible as a lifelong career (Ismail, 2006:1).

Ard *et al.*, (2006:246) have suggested that library professionals should create LIS career displays which elucidate the job opportunities in LIS and list the statistics on the job placement of LIS graduates, and indicate what LIS professionals do on a typical day. LIS recruitment teams need to collaborate with the school's career centres. Ard *et al.*, (2006) also mentioned that librarians should publicise the careers to the community they serve; in particular reference librarians have the responsibility to market the LIS field to the community. Mugot (2012) has stressed that it is essential for LIS practitioners to have joint activities and interactions so that LIS is able to recruit more diverse students. More surveys must be conducted to discover the influences that are shaping students to pursue a career in the LIS profession so that the profession can develop new ways of marketing itself in order to meet the changing needs of the community and adjust to the digital environment (Cherry, Freund and Duff, 2013). The social environment has become largely dependent on knowledge and information as their existence hinges on the availability and accessibility of information (Aghauche, Anyaegbu and Madubueze, 2015). LIS is devoted to serving the community and providing accurate information, thus contributing to the development of society (Cherry, Freund and Duff, 2013).

A crucial factor in the development of any career is the system of teaching its applicants in the course (Aghauche, Anyaegbu and Madubueze, 2015). Mugot (2012:190) states that in order for the LIS field to recruit and motivate more students to pursue their career in LIS, they should be trained and appraised of the trends in the profession. Rakwaro and Bii (2016:13) state that LIS educators have understood the need for tapping into developing information markets such as information technology, management, media, publishing, and record keeping. However, Fraser-Arnott (2016:130) insists that LIS schools should ensure that the course is known and should additionally give students transferable abilities that will enable graduates to get work in a wide variety of industry sectors. In a recent study by Shahbazi, Fahimnia and Khoshemehr (2016:59) it

was stated that LIS needs to return to its objectives, programmes and capacities and be set up for change if it aims to establish its function and promote the public interest. Therefore, the library profession decision-maker has a great influence on the information profession (Otiike, 2017:73).

3.9 Summary

The literature reveals that student's perceptions of the LIS profession are not uniform. The findings of the reviewed studies illustrated the need for LIS marketing and the improvement of students' IT skills to compete in the job market and to meet employers' expectations. In a brief overview of the current LIS job market, many studies have found that there are various employment positions for LIS. Most of these findings are consistent when it comes to IT-based jobs. Researchers are of the view that students should be taught what is expected in the job market. The motivations for career choice revealed by the literature show that different factors influenced students to join the profession. The literature reveals that there is an urgent need for the profession to act more assertively and proactively in marketing the functions and information skills of library professionals. The results of these studies often conclude that a primary influence is derived from professionals' family, friends, interests and the previous work experience in libraries. However, the reviewed literature does not indicate whether the innovation-based jobs have changed the employability criteria of members of the LIS profession. There are different career opportunities that have recently opened up for LIS professionals. It is also not considered that the LIS status is being transformed by the current information environment. The next chapter discusses the research methodology which this study applied. Therefore, this study serves to fill missing gaps in the literature. The next chapter discusses the research design.

CHAPTER FOUR: RESEARCH DESIGN

4.1 Introduction

Research is a procedure of making claims and, after that, refining some of them for other claims that are more strongly warranted (Creswell, 2003:7). Kothari (2004:14) defines research as a systematic and logical search for appropriate information on a specific topic. It's a logical technique consisting of systematic classification and interpretation of data (Kumar, 2014:28). The research design is defined by Terre Blanche, Durrheim and Painter (2006:34) as a strategic framework for activity that serves as a bridge between the researcher's implementation of the research and the research questions. It is the plan for the research process (Thomas, 2013:103). Singh (2014:79) asserts that research design is a procedure that is adopted by a researcher to answer questions precisely, validly and objectively. Frankfort-Nachmias and Nachmias (1996) describe research design as the blueprint that enables the researcher to come up with solutions to the research problem and guides the researcher in different phases of the research. It outlines how the study will be performed (Kumar, 2014:59). It includes a layout of what the researcher will do from writing hypotheses and their operations to the final analysis of data. In this study, the research design used is presented. It includes the following: the research paradigm, approach, methodology, research methods, sampling, data collection instruments and procedure, the population, reliability and validity, ethical considerations and data analysis.

4.2 The research paradigm

A research paradigm is a perception about research held by a community of researchers that is based on a set of shared assumptions, values, concepts and practices (Johnson and Christensen, 2014:31). There are two different types of research assumptions: epistemology and ontology (Sunders *et al.*, 2009). Epistemology and ontology comprise research paradigms (Mack, 2010:5). The view of reality is called ontology, whereas the view of how individuals acquire knowledge is called epistemology (Mack, 2010:7). However, TerreBlanche and Durrheim (1999) state that the research process has three major dimensions: ontology, epistemology and methodology. Ontology is the reality that researchers are investigating, epistemology is the relationship between that reality and the researcher, and methodology is the technique used by the researcher to investigate that reality (Healy and Perry, 2000:119). Mack (2010:4) states that philosophical perspectives inform

the researcher on an epistemological perspective which informs research methodology and directs it to research methods employed to gather data. Therefore, it is possible for the researcher to draw on more than one paradigm; depending on the types of the work the researcher is doing (TerreBlanche, Durrheim and Painter, 2006:9). Epistemology and ontology together make up the philosophical paradigm of research (Mack, 2010: 5). The research paradigm is constituted by certain philosophical assumptions that direct and guide thinking and action (Mertens, 2005:7). A paradigm tells researchers how explanations, descriptions, and interpretation should be developed within the tradition in which one is working (Perri 6 and Bellamy, 2012:33). Different research paradigms are listed by Patel (2015: n.p.). They are constructivism, positivism, pragmatism, subjectivism, interpretivism and critical science. However, Kalusopa (2011:214) mentions two major research traditions in social science; interpretivism and positivism.

4.2.1 Ontology

Ontology specifies the nature of reality that is to be studied, and what can be known about it (Terre Blanche and Durrheim, 1999:6). Bhattacharjee (2012:18) states that ontology refers to individual assumptions about how one perceives the world. Hart (2007: 86) adds that ontological issues are concerned with what we accept to exist and are able to research. Ontology is concerned with the nature of the phenomenon or the nature of the reality that a researcher proposes to study (Saunders, Lewis and Thornhill, 2009). Ritchie and Lewis (2003: 11) have classified ontology into three categories: idealism, materialism and realism. Idealism is the belief that reality is in an individual's mind and everything that exists in our minds is dependent on activity in the mind (Walliman, 2011:32). Maree (2016: 67) asserts that realism is an outer reality which exists independent of an individual's beliefs of it, meaning there is a difference between the existence of the world and the interpretation of that world held by people.

This study adopted idealism as the ontological worldview assumption of this study. The current study sought to investigate the perceptions of students about LIS programmes and career opportunities. The researcher believes that the views of students of the study phenomena can only be constructed from their minds. Their views about LIS are constructed and interpreted in the minds of the study participants.

4.2.2 Epistemology

Epistemology is concerned with the methods for knowing and learning the social world and focuses on how we can think about the real world (Ritchie and Lewis, 2003: 11; Hart, 2007:86). It is the branch of philosophy dealing with knowledge and its justification (Johnson and Christensen, 2014:32). Marsh and Furlong (2002:18) share the view that epistemology reflects one's perspectives of what can be known about the world and how it can be known. Neuman (2014:95) has described epistemology as an area that is concerned with the creation of knowledge. Walliman (2011: 32) agrees and states that epistemology is about knowledge and its validation and the research methods used.

Curtis and Curtis (2011:11) state that epistemology is the theory of knowledge that informs how research is shaped in its extensive sense. Epistemology refers to an individual's assumptions about the best way to study the world (Bhattacharjee, 2012:18). There are three major epistemological perspectives in research: positivism, interpretivism and critical research. The positivist paradigm states that the reality is everything that can be perceived through the senses (Sarandakos, 2012:36). Hjørland (2004: 131) added that the positivist paradigm is imperative in library and information science because researchers approach their research objectively, using quantitative or qualitative research methods. Creswell and Crack (2011: 40) argue that positivism is associated with quantitative research approaches.

The current study used the paradigm of positivism. The researcher believes that students' knowledge about LIS and its job market can be derived from the students' sensory experience gained through experience, from lecturers and observation. Mack (2010:6) states that positivist research emphasises statistical analysis and generalises findings. Positivism also allows the researcher to generalise results from the sample of this current study. Creswell and Crack (2011: 40) argue that positivism is associated with quantitative research approaches. On the other hand, both quantitative and qualitative research was used in the current study. The positivist paradigm dictates that only phenomena which can be known through the senses can truly create information; it is objective rather than subjective (Thomas, 2013:107; Perri 6 and Bellamy, 2012:50). The positivist paradigm is appropriate in this study; the phenomena investigated can only be created through observation and experience by the study participants. The current study was also objective in nature to avoid unfair collection and analysis of the research data.

4.3 Research strategy (reasoning)

A research strategy involves thinking about something and developing an understanding of it through reasoning (Johnson and Christensen, 2014: 13). Inductive and deductive reasoning are the two major kinds of research reasoning, but Blaickie (2010) adds two other strategies, namely abduction and retroduction. Deductive and inductive reasoning use propositional logic to build up a valid argument based on facts (Somek and Lewin, 2011:104). According to Greener (2008:16) and Bhattacharjee (2012:15) deductive strategies start by looking at the theory, produce hypotheses from the theory which relates to the research question. Leedy (2001:43) points out that deduction is a form of reasoning where two premises are relevant. Premises are statements or assumptions that are self-evident and widely accepted. True premises develop as true if the evidence is also true. It goes from the general and works its way down to the more specific (Somek and Lewin, 2011). It arrives at a specific conclusion based on generalisations. Deduction does not add any new knowledge (Strydom, Fouche and Delport, 2005:47).

Inductive reasoning starts by focusing on the research that is being undertaken (Greener 2008:16). Inductive reasoning develops general conclusions after a particular observation or sensory experience (Williman, 2010:32; Bhattacharjee, 2012:15). Bhattacharjee (2012:15) expands on this and adds that inductive conclusions are not more grounded than deductive conclusions. Monette, Sullivan and DeJong (2011: 43-35) assert that inductive strategies involve inferring something about the entire group of objects from our knowledge of one, whereas deductive reasoning entails inferring a conclusion from some propositions. Babbie (2001:34) states that inductive reasoning moves from the particular to the general, from the set of specific observations to the discovery of a pattern that represents some degree of order among all the given events. Inductive studies observe the sample and then draw conclusions about the population from which the sample comes (Strydom, Fouche and Delport, 2005:47).

This study employed inductive reasoning as its research strategy. Inductive studies, according to Strydom, Fouche and Delport (2005:47), look at a sample and then draw conclusions about the population from which the sample was drawn. Therefore, the study draws a conclusion based on its findings. Data was collected from students first, analysed and interpreted and conclusions were drawn. The study generalises the findings from the sample of participants on which a study was conducted.

4.4 Research methodology

Research methodology is the systematic method of solving a research problem. There are various general steps adopted by researchers when conducting research (Kothari, 2004; Creswell, 2014). Johnson and Christensen (2014:32) define methodology as the identification, study and justification of research methods. Methodology specifies how the researcher may go about practically studying whatever he or she believes can be known (TerreBlanche and Durrheim, 1999:6). Kothari (2004:21) defines research methodology as a way to systematically solve the research problem. There are three research methodology approaches used by researchers, namely qualitative, quantitative, and mixed methods. Quantitative and qualitative have different strengths and weaknesses (Punch, 2005:56).

4.4.1 Mixed method

Mixed methods research is a research approach that combines both quantitative and qualitative research (Creswell, 2009: 3; Flick, 2011: 250; Creswell and Plano Clack, 2011:2). A mixed method study applies more than one research approach in one study. Creswell and Plano Clark (2011:43) believe that both qualitative and quantitative research methods can be used in a single study. Punch (2005:292) defines the term “mixed methods” as empirical research which brings together qualitative data and methods and quantitative data and methods. Creswell (2006:12) points out that in mixed methods, the researcher can use many approaches to collecting data rather than subscribing to only one approach. Its central premise is that the use of both approaches in a single study provides a better understanding of the research question or problem than either approach alone (Creswell and Plano Clark, 2011:5). In addition, the quantitative and qualitative strategies can be blended only if the research is observing objective facts, through the use and manipulation of the numbers and also the perceptions these involve of these facts (Creswell, 2009:17). The method additionally adds strengths that offset the weaknesses of both quantitative and qualitative research (Creswell and Plano Clark, 2011:12). It also gives more evidence for studying problems than is possible using one research method alone.

4.4.2 Qualitative research

Qualitative research is an approach that explores the meaning of individuals or groups to solve human problems. The research process involves merging questions and procedures. In qualitative

research, data collected in the research participants' setting, and the researcher interprets the meaning of the gathered data (Creswell, 2005: 37). The data in the qualitative study is collected in the form of observation that is recorded in language or in a written form (Terre Blanche, Durrheim and Painter, 2006:47). However, Punch (2005:58) pointed out that qualitative data may range from structured to unstructured. Monette, Sullivan and DeJong (2011:39) state that qualitative research includes data in the form of descriptions, words, pictures rather than measurement or counts. Brink (1993:35) states that qualitative researchers are interested in people's experiences, beliefs and meaning systems from the perspective of the people; they are not inspired by casual laws. Qualitative research is likely to be associated with inductive to generating theory.

According to Flick (2011: 252), qualitative methods aim to provide a detailed description of the processes and perspectives used during data collection in a small number of cases. Hence, in this study, qualitative data was collected to supplement quantitative data. The present study used content analysis to analyse open-ended data collected from the respondents. Cresswell (2003:9) agrees that qualitative researchers tend to use open-ended questions so that study participants can express their opinion easily with no restriction. This allowed the researcher to gather more verbatim data without restricting the respondents regarding their perceptions. It was therefore judicious to collect qualitative data in the current study to supplement quantitative data.

4.4.3 Quantitative research

Quantitative research is rooted in the philosophy of rationalism. It follows structured and predetermined sets of procedures to explore; aims to quantify the extent of variation in a phenomenon. It also believes in substantiation on the basis of a larger sample size (Kumar, 2014: 381; Maree, 2016: 162). Sarantakos (1988: 6) describes quantitative research as the type of research approach that depends on the methodological principle of positivism. A quantitative research approach has its origins in positivism or is based on a positivist paradigm (Struwig and Stead, 2001; Monette, Sullivan and DeJong, 2011; Sarantakos, 2012; Sukamolson, n.d.) According to Sukamolson (n.d.: 4) quantitative research can be classified as correctional research, survey research, causal-comparative research and experimental research. However, Sarantakos (1988:56) listed the most common methods of quantitative research as survey, observation, sociometry method, and experiment. Quantitative research is associated with a deductive approach to testing a theory (Creswell, 2009; Kothari, 2004). In addition, Noble and Smith (2015:34) opine that

quantitative researchers apply arithmetical methods for establishing the reliability and validity of research results.

This study used a quantitative research approach in investigating students' perceptions about the LIS programme and its career opportunities. A quantitative approach is one in which the researcher primarily uses positivist claims for emerging knowledge (Creswell, 2003:19). The quantitative approaches try to understand the facts of the research investigation from an outsider's perspective (Welman, Kruger and Mitchell, 2005: 9). The current study used a quantitative approach to investigate students' perception with regard to LIS programmes and their position in the job market. Sukamolson (n.d.:5) agrees that quantitative research is also useful to quantify attitudes, behaviours, opinions and find out how the sample feels about a certain issue. Hence, the present study used percentages and tables and quantified responses from the study population. Quantitative data is analysed using figures (Punch, 2005:108). The appropriateness of a quantitative approach in this study allowed the researcher to carry out fair data analysis.

4.5 Research methods

Research methods are tools that researchers use to collect information. These tools enable the researcher to collect data about social reality from individuals, texts, groups and other media. Research methods incorporate all the procedures and strategies that are used for the transmission of research (Singh, 2014:44). The basic research methods utilised in LIS are historical research, survey research, case studies, bibliometrics, citation studies and experimental research (Aina, 2002:19). In the qualitative research approach, there is case study, ethnography, grounded theory, phenomenology and narrative studies (Maree, 2016: 75). The quantitative research approach applies surveys, experiments, research and longitudinal study (Cresswell, 2009: 50). This study used the survey method.

4.5.1 Survey research

Survey research is one of the extensively used methods of gathering information from individuals (Maree, 2007:9). The principle of survey method research is to seek the opinions of individuals on a particular problem (Aina, 2002: 19). Sarantakos (2012:223) describes surveys as the method of collecting data in which information is gathered through written or oral addressing. Surveys gather information by specifically asking participants about their experiences, attitudes or knowledge

(Graziano and Raulin, 2004: 309). Neuman (2014:317) shares a similar view: that survey research collects data related to the knowledge of a phenomenon, self-classification, expectations, and opinions of respondents. Survey studies are conducted in the case of descriptive research (Kothari, 2004:133). Survey research is appropriate for studies that have distinctive individuals as the unit of investigation. They may be using questionnaires and/or interviews (Thomas, 2013: 176). Surveys are primarily concerned with the present, but at times do consider past events and influences as they relate to current conditions.

Sukamolson (n.d: 4) states that in survey research, scientific sampling is used and questionnaires designed to measure characteristics of the population with statistical precision. It additionally enables management to make comparisons between groups. The research design for the survey can be classified as being either longitudinal or cross-sectional design (Aina, 2002: 33). A cross-sectional survey focuses on a cross-section of a population at one point in time (Monette, Sullivan and DeJong, 2011:92). On the other hand, longitudinal survey research involves the gathering of data over a certain period, which can be months, years or more (Monette, Sullivan and DeJong, 2011:93).

The current study used a survey design to investigate students' perceptions about LIS programmes and their career opportunities. Survey methods are used in compiling information based on the background, belief, perception, behaviour, and attitudes of a targeted population (Neuman (2009: 45). The survey method can be used for exploratory, descriptive or explanatory research (Bhattacharjee, 2012:82). The study was also a descriptive survey. In a survey, data is collected from a varied number of respondents. The study collected data from first year and final year students studying LIS. Research questions in a survey study can be asked in different ways, including closed questions, unrestricted and multiple-choice questions (Singh, 2014:193). In this study, data was collected through the use of both structured and unstructured questionnaires.

4.6 Study population

The study's population can consist of many objects such as organisations, individuals or events. (Williman, 2010: 94). The study population is the group of a specific sampling unit, which consists of all the sampling units relevant to the research questions (Maree, 2016: 164). Bless, Higson-Smith and Sithole (2013:164) state that it is the set of objects or individuals that are the focus of a

research project. It is the set of eligible people for a collection of data (Singh, 2014: 172). Neuman (2009:201) states that a population is a well-defined group from which a sample can be drawn. Bless, Higson-Smith and Sithole (2013: 162) describe a target population as the entire set of objects or people that is the focus of a research project, and about whom the researcher wants to determine some characteristics. The table 1 below shows the targeted population of the present study.

Table 1 : Population of the study

University of Zululand		Durban University of Technology	
Final-year undergraduate students	35	Final-year undergraduate students	56
First-year undergraduate students	44	First-year undergraduates students	112
Total	79	Total	168
Grand total			247

The study population consisted of students from the Department of Library and Information Studies at the Durban University of Technology as well as students from the Information Studies Department at the University of Zululand. In total, the study targeted 247 students from both universities. The population of this study comprised all final-year and first-year students from these two LIS schools in the KwaZulu-Natal province. A final-year student in this study was defined as someone who is in the final year of the LIS programme, which can be level three or level four and registered at the University of Zululand or at the Durban University of Technology. This target study population was used because the researcher perceived that the students have the characteristics required in this study.

The two selected population groups were most suitable as they allowed the researcher to compare the results between students' groups from different types of institutions and at different levels of study.

4.7 Sampling method

Sampling is the process of choosing a sample from a bigger population to become the basis for estimating the prevalence of information of interest (Kumar, 2011: 396; Terre Blanche, Durrheim and Painter, 2006:49). It is the systematic manner of selecting for inclusion in a study, Kumar

(2014). There are two types of sampling, namely probability and non-probability sampling methods (Singh, 2014:109; Sarantakos, 1998:141).

4.7.1 Probability sampling

The probability sample is a sampling technique in which every unit in the population has an equal chance of being chosen in the sample; it includes random selection (Bhattacharjee, 2012:76; Bless, Higson-Smith and Sithole, 2013:166). Williman (2010:96) defines probability sampling as the technique that gives the most reliable representation of the entire population. It additionally enables the researcher to make generalisations about the population's results. In probability sampling, a sample is randomly selected when each member of the population has a known chance of being selected for the sample (Bless, Higson-Smith and Sithole, 2013:166). Maree (2016:197) states that probability strategies depend on the principle of probability theory and randomness, while non-probability methods do not. Cohen, Minion and Morrison (2005:16) indicate that probability sampling is useful when the researcher wishes to make a generalisation of the wider population, whereas non-probability sampling deliberately avoids representing the wider population. Graziano and Raulin (2004: 314) state that in probability sampling, each person has some known probability of being included in the sample. Cohen, Manion and Marrison (2005:116) have listed different types of probability samples, namely systematic sample, stratified sample, simple random sample, stage sample, cluster sample and multi-phase sample. However, Sarantakos (1998:150) has mentioned three other types of probability sampling: spatial sampling, panel sampling and area sampling.

4.7.2 Non-probability sampling

The non-probability sampling method is a sampling technique where the population has zero chance of selection, and the selection cannot be accurately determined (Bhattacharjee, 2012:76). Non-probability sampling makes no claim of representativeness and is less strict (Sarantakos, 2012:141). It is the sampling technique that depends on the researcher's judgement and the researcher cannot make generalisation based on the findings (Williman, 2010:96). Bless, Higson-Smith and Sithole (2013:166) state that in non-probability sampling, the probability of including every component of the population in a sample is unknown. Sarantakos (2012:151) Sarantakos, (1998:151-153) and Frankfort-Nachmias and Nachmias (1996:185) have mentioned the following

different types of non-probability sampling, namely as accidental sampling, snowball sampling, quota sampling, and purposive sampling.

A census of first-year and final-year students was employed. Survey research may either be samples or census surveys (Kothari, 2004:134). For that reason, this study was a census survey of undergraduate LIS students from two universities. A census is a well-organised process of collecting, recording and analysing information about every member of the population (Surbhi, 2016: n.p.). Kish (1979:101) opines that a census provides information in great detail for small domains. In this study, all members of the population were targeted. That is, all 247 students were targeted.

4.8 Data collection instruments

In social science research, there are different ways in which data can be collected. There are two major data collection approaches: primary and secondary sources (Kumar, 2014: 171). Kumar (2014) additionally expresses that methods of data collection can be grouped into three categories as the mixed method, qualitative and quantitative method. Research data can be collected in many forms (Maree, 2016: 77). A research instrument is anything that becomes a means of collecting data, for example, questionnaires, interview schedules, observation and field diaries (Kumar, 2014: 381). The study used a questionnaire as a data collection tool. The instrument is discussed below.

4.8.1 Questionnaire

The questionnaire is a written list of questions, the appropriate responses to which are recorded by respondents (Kumar: 2014:178). There are three types of questionnaires: structured, unstructured and semi-structured. Questionnaires can be open-ended and closed-ended (Thomas, 2013: 207). Williman (2010:97) opines that questionnaires are particularly suitable instruments for gaining both quantitative and qualitative data. However, Trueman (2015: n.p.) argues that questionnaires are often used in quantitative research. Thomas (2013: 209) states that closed questions can be organised in a number of ways, depending on the kind of answer required. Nevertheless, Kothari (2004: 114) states that structured questionnaires are questionnaires which are concrete, definite and pre-determined. Questionnaires may also have fixed alternative questions in which the informants are limited to the stated alternatives, whereas closed-ended questions allow the

researcher to ask respondents to provide their own answers to the questions being asked. Closed-ended questions are also called unstructured questions (Babbie, 2001:240).

This study used both structured and unstructured questions to investigate the perception of students about the Library and Information Science (LIS) programme and its career opportunities (see Appendix 5). In this study, structured and unstructured questions were used because the researcher wanted respondents to provide their own answers without being restricted. Aina (2002: 24) shares a similar view, that questionnaires may be considered if they gather both quantitative and qualitative data. The researcher believes that perceptions cannot be investigated through closed-ended questions only. This study used self-administered questionnaires which were personally distributed to respondents and were received on the same day. This study chose questionnaires over other data collection methods because Gorman and Clayton (2005:95) noted that the data collection instruments must be carefully chosen to suit the type of investigation being undertaken. In this study, questionnaires were appropriate to investigate the research question.

Several studies in Library and Information Science have successfully used questionnaires to collect data from LIS students, for example, Bickley and Corral ,2011 ; Aghauche ,Anyaeibu and Madubueze ,2015; Cherry *et al.*,2011 ;Ard *et al.*, 2006 ; Alansari,2011 ; Dali and Caidi , 2016. For that reason, a questionnaire was considered suitable for this study.

4.9 Data collection procedures

The data in the study was collected with the help of lecturers from the two universities. In preparation for data collection, permission was requested and sought from the University of Zululand and the Durban University of Technology after ethical clearance was granted. During data collection, the researcher received permission from the heads of the departments to administer the questionnaires to first-year and final-year students. The questionnaires were self-administered at the two universities. The researcher started distributing questionnaires in October 2017 at the University of Zululand. At the Durban University of Technology, data collection was conducted in the first semester of the academic year 2018. Questionnaires were distributed to first-year and final-year undergraduate students who volunteered to participate in the study. The research questionnaires were handed to the respondents; the researcher was available in cases where

questions arose. The researcher received all the distributed questionnaires returned on the same day of the distribution. In all, 137 out of 247 questionnaires were returned.

4.10 Data analysis

In research, there are different methods of data analysis. Data analysis is the process of bringing order, structure and meaning to the mass of collected data (De vos, 2005:333). Analysing data consists of examining the database to address the research question or the theory (Creswell and Clark, 2011: 208). This study collected both qualitative and quantitative data, hence the data was analysed using qualitative and quantitative methods.

4.10.1 Statistical analysis

This study used descriptive statistics in the form of percentages and figures. The Statistical Package for Social Sciences (SPSS) was used to analyse and manipulate quantitative data. Maree (2016) points out that a quantitative approach allows generalising the findings to a whole population, whereas qualitative research provides an in-depth understanding of the research problem. Creswell and Clark (2011:210) state that quantitative data analysis means the results received from the study participants are meaningful indicators of the construct being measured. Descriptive statistics is a collective name for a number of statistical methods that are used to organise data. It can be divided into two methods of describing data: numerical and graphical ways (Maree, 2016:204). Graphs and tables with statistics were used to describe quantitative data.

4.10.2 Content analysis

Creswell and Clark (2011: 208) stated that qualitative data analysis involves the coding of data by dividing the text into phrases, sentences or sometimes paragraphs, assigning the label to each unit as well as grouping the codes into themes. In this study, content analysis was used to determine how study participants interpret the phenomena under investigation.

Qualitative data was analysed through a content analysis process, data was coded and grouped question-by-question. Content analysis is the systematic analysis of the content of a text, for example: who says what, why and to what extent, with what effect (Bhattacharjee, 2012:115). The researcher of the study analysed the data, by searching for similarities, differences, categories and themes. The researcher constructs and codes data; after coding, data is categorised according to themes and response similarities.

4.11 Triangulation

Triangulation validation serves as a way of strengthening the validity of a study. Triangulation can also be applied throughout a study, although the practice has tended to be associated with a study's data collection phase (Yin, 2011:81). Bhattacharjee (2012:115) stated that data triangulation works across data collection. Cohen, Manion, and Morrison (2005:112) state that triangulation is the use of two or more methods of data collection in the study of some aspect of a human being. In this study, data triangulation was conducted because the study collected both types of data. The qualitative data mainly supplemented the quantitative data. For example, if a closed-ended question was asked, an open-ended question was then used as a follow-up question whereby respondents expressed their opinions.

4.12 Ethical consideration

Ethical considerations in research are always changing and evolving (Bless, Higson-Smith and Sithole, 2013:36). Research ethics is defined by Johnson and Christensen (2014:125) as the set of principles developed to guide and assist researchers in conducting ethical studies. The ethical issues that were considered in the study start from the conceptualisation of the research problem, research design phases, explaining the study purpose, informed consent and confidentiality in the study. The researcher received permission to conduct the study from the research and ethics committees of the two universities and this was granted (see Appendix 1 and Appendix 2). Bless, Higson-Smith and Sithole (2013:30) emphasise that study participants should be informed about the nature of the research in which they are asked to participate. Johnson and Christensen (2014:131) state that informed consent is the agreement to participate in a study after being informed of its purpose, procedure, risks, benefits, alternative procedures and limits of confidentiality. Therefore, the consent form was given to students and was also sought from all the participants. Participants were asked to sign an informed consent form before filling in the questionnaire (see Appendix 4).

The purpose of the study was clearly expressed on the first page of the questionnaire. The participants' names in this study were not revealed under any conditions. The researcher assured them that confidentiality of respondents is kept strictly. The study was voluntary and the respondents were allowed to withdraw from the study at any time. All study participants were treated equally.

4.13 Reliability and validity of instruments

The validity and reliability of research instruments identify methodological shortcomings in the instrument, for example faulty scales and inadequate instructions (Aina, 2002:81). Reliability and validity are the key aspects of all research (Brink, 1993:35). Morse *et al.*, (2002: 2) shares a similar view: that reliability and validity are applied in all research studies. The strategies used to address reliability and validity in quantitative research is not the same as in qualitative research. Golafshani (2003: 597) states that the use of validity and reliability are common in quantitative research and now it is also considered in the qualitative research paradigm. Bless, Higson-Smith and Sithole (2013:36) opine that both validity and reliability are vital for every instrument. However, Brink (1993:35) and Noble and Smith (2015:34) point out that many qualitative researchers have used terms such as trustworthiness, consistency, credibility, value, truth and applicability instead of using reliability and validity when referring to criteria for evaluating the scientific merit of qualitative research. This is despite the fact that the measures and tests used to establish the reliability and validity of quantitative research cannot be applied to qualitative research (Noble and Smith, 2015:34). Therefore, the validity and reliability of findings are essential (LeCompte and Goetz, 1982:31); However, if the instrument is not reliable, it cannot be valid (Maree, 2016:238).

4.14.1 Reliability

Reliability is a matter of whether a particular technique applied repeatedly to the same objects yields the same results (Babbie, 2012:140). It is the consistency of the analytical procedures, including accounting for personal and research method biases, that may have influenced the results (Noble and Smith, 2015:34). LeCompte and Goetz (1982:31) state that reliability is concerned with the reliability of scientific findings. Reliability assists the researcher to gauge the truthfulness, believability and credibility of research findings (Neuman, 2011:188). Golafshani (2003:601) notes that although reliability is used for testing quantitative research, the idea is most often used in qualitative research.

Maree (2016:238) states that the reliability of an instrument means that if the same instrument is used at different times with different people from the same sample, the results should be the same. In this study, the researcher designed a questionnaire to collect data from two groups of students; the results are quite similar. Reliability is the ability of the instrument to produce a consistent

outcome (Sarantakos, 1998:83; Neuman, 2011:208).The consistency of the questionnaire was achieved since the language used was understood by all the respondents.

4.14.2 Validity

Validity helps the researcher to identify if the research instrument measures what it is supposed to measure (Neuman, 2011:208; Welman, Kruger and Mitchell, 2005: 142; Leedy and Ormrod, 2011: 28). The validity of the questions depends on features such as whether they make sense, such as are they easy to understand, are they asking what they are supposed to be asking? (Aina, 2002:81; Maree, 2016:239). Brink (1993:35) opines that validity in research is concerned with the accuracy and truthfulness of the research findings. Bapir (n.d.: 9) argues that there is more than one type of validity. However, Neuman (2011:192-194) states the different types of validity which are listed as: content validity criterion, validity, face validity and constructive validity. Brink (1993:36) states that the researcher can increase the validity of responses by ensuring that sources are clear, for instance how information will be gathered, what the motivation behind the investigation is, what will be done with the research findings and comparing the findings obtained with other existing research. In addition, Golafshani (2003:599) opines that the traditional criteria for validity discover their foundations in a positivist tradition.

In this study, validity investigation was tested through the pilot study; the instruments used for data collection were piloted. The researcher wanted to make sure that the instrument measures what it is designed to measure. It is important to conduct pilot studies, whether it is a qualitative or quantitative study that is undertaken (Strydom, 2005:33). In this study, a pilot study was conducted for testing and correction purposes. The study questionnaires were piloted using ten post-graduate students from the Department of Information Studies at the University of Zululand.

The pilot study was initially conducted on both male and female students. The instrument was edited for ambiguous questions as well as grammar changes after being piloted. Bless, Higson-Smith and Sithole (2013:217) argue that a questionnaire is only usable when it has been standardised, edited and, if possible, pre-tested through the pilot study. The questionnaire was standardised in the study so that all the study participants can be asked questions in the same order. Harding (2013:48) believes that a pilot study is vital in any form of research as it helps identify potential difficulties. Hence, the purpose of the pilot study was to test the research instruments.

4.14 Summary

This chapter discussed the research design of this study. This includes the research paradigm, research methodology, sampling techniques, instrumentation and data analysis. This study used a combination of both qualitative and quantitative methodologies; both research methodologies were effective and useful in investigating the perceptions of students. The study was a census survey of first-year and final-year LIS undergraduate students from two LIS schools. The chapter has clearly explained the research instruments used in the study for data collection, which is an open and closed-ended questionnaire. The findings were triangulated. The next chapter discusses the data presentation, analysis and interpretation of the findings.

CHAPTER FIVE: DATA PRESENTATION AND ANALYSIS

5.1 Introduction

This chapter presents the findings of the study. The investigation was conducted by means of self-administered questionnaires. The questionnaire was divided into four sections: demographic information; influences to enrol in the LIS profession; students' perception of LIS programmes; and students' awareness of LIS career opportunities. The study collected both qualitative and quantitative data. The qualitative data was aimed at soliciting the students' perception and opinions about the LIS programme without being limited to closed-ended questions. This analysis is based on 137 responses of first-year and final-year undergraduate students from two universities; the University of Zululand (KwaDlangezwa campus) and the Durban University of Technology (ML Sultan campus). There were 71 responses from first-year students and 66 from final-year students. The total number was 247 of the targeted population. The study received 137 questionnaires from both groups, which gave a 55.46% response rate. The quantitative data is presented in the form of figures and tables and qualitative data is presented in verbatim quotations.

5.2 Demographic information

This section presents the demographic information of respondents, that is, the gender, academic levels, qualification and university affiliation.

5.2.1 Gender of respondents

Respondents were asked to state their gender. This question was asked to determine which gender is dominant in the LIS profession. Figure 1 presents the respondents' gender. **N =137**

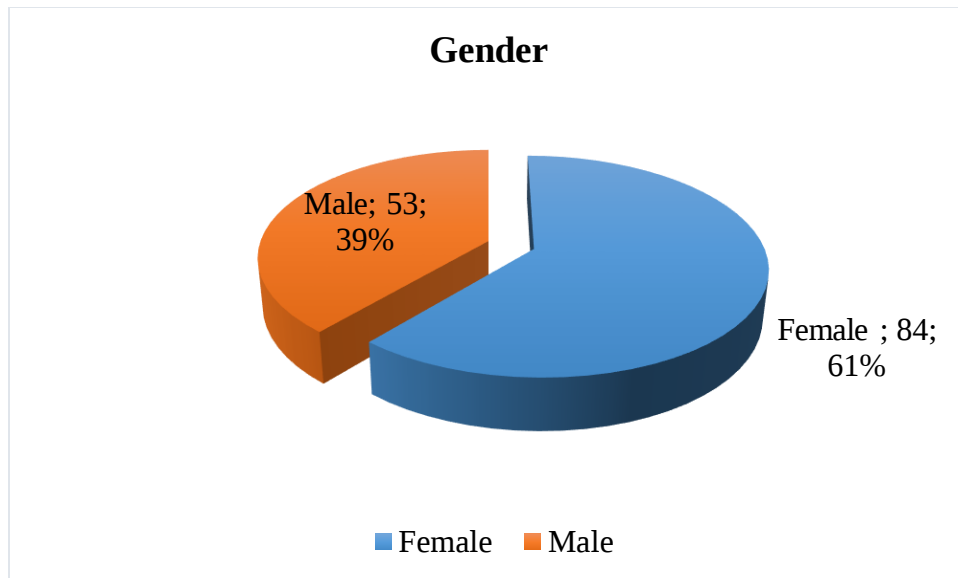


Figure 1: Gender distributions

The figure 1 indicates that of 137 participants, 84 (61%) were females and 53 (39%) were males. This result indicates that in the two universities, female students are in the majority in LIS programmes.

5.2.2 Academic levels

The study selected two groups of students; first-year and final-year students. The figure 2 shows the results of respondents' level of study. **N=137**

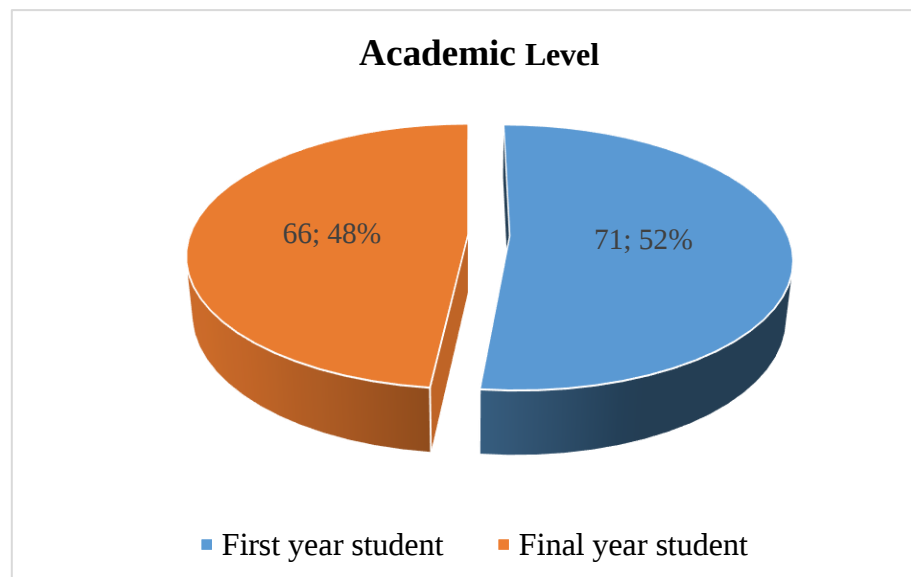


Figure 2: Academic level

The results above show that the majority of respondents were first-year students with 71 (52%), followed by final-year students with 66 (48%).

5.2.3 Programme of study

The respondents were asked to indicate their programme of study. The results are shown in figure 3. **N= 137**

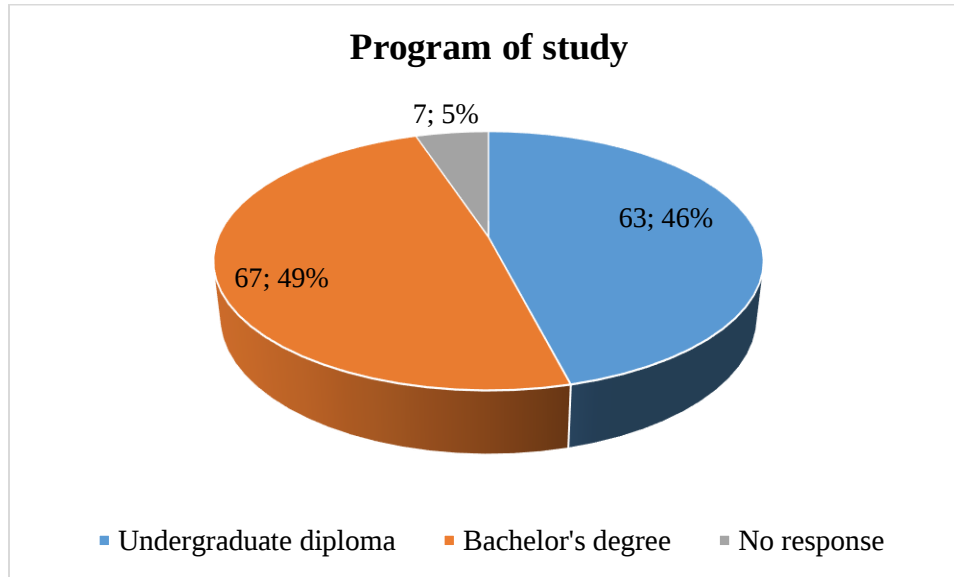


Figure 3: Programme of study

The results in figure 3 indicate a slight balance of respondents' programme of study. The majority of 67 (49%) were bachelor's degree students, followed by 63 (46%) undergraduate diploma respondents. The remaining 7 (5%) respondents did not indicate their programme of study.

5.2.4 University affiliation

The respondents were asked to indicate their university affiliation. The figure 4 shows the respondents' academic institutional affiliation. **N=137**

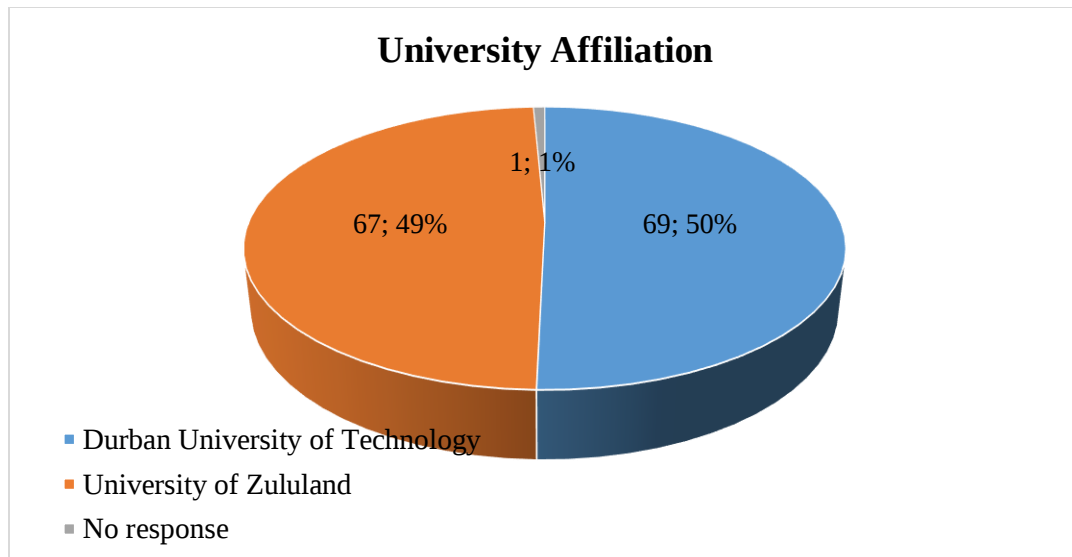


Figure 4: University affiliations

The figures 4 show the results of respondents' institutional affiliation. There is a slight imbalance in the representation by institutions. The majority of the respondents, 69 (50%) were from DUT and 67 (49%) from Unizulu. This includes both final-year and first-year students. However, one respondent did not indicate their institutional affiliation.

5.3 Influences to enrol into the LIS programme

This section examined factors that influenced the students to enrol in the LIS programme. Firstly, the study examined the historical awareness of LIS by students. It also looked at the students' perceptions of the first time they heard about LIS. It covers all data collected from both institutions. The data was analysed simultaneously for final-year and first-year respondents.

5.3.1 LIS awareness

The purpose of this question was to determine when students came to know about LIS programmes and at what stage of their schooling they came to know about it. The results obtained are shown in the table 2.

Table 2 : Students' awareness of LIS N=137

Stages of LIS awareness	First- year students		Final-year students	
	Frequency	%	Frequency	%
After high school	34	47.9	26	39.4
At high school	15	21.1	17	25.8
University	14	19.7	16	24.2
Do not remember	4	5.6	3	4.5
Other(s)	2	2.8	4	6.0
At primary school	2	2.8	0	0
Total	71	100	66	100

The results indicate that most respondents learned about LIS after they had finished high school; 34 (47.9%) of first-year and 26 (39.4%) of final-year respondents. These figures were followed by those who learned about LIS in high school, with 15 (21.1%) being first-year students and 17 (25.8%) being final-year students. There are students who first learned about LIS when they were already at university; 14 (19.7%) of first-year respondents and 16 (24.2%) of final-year respondents. Another 4 (5.6%) of first-year respondents and 3 (4.5%) of final-year respondents said they couldn't recall. Only 2 (2.8%) of first-year respondents came to know LIS at primary school and none (0%) of final-year respondents were aware of LIS at primary school. These results reveal that the majority of students got to know about LIS after high school.

The results above show that most respondents in the study had knowledge of LIS after finishing high school. A small number of students indicated that they were aware of LIS at primary school. The findings can probably be explained by the fact that LIS is not well known by primary school students.

5.3.2 Time of pursuing a LIS career

When respondents were asked about when they considered studying LIS, the students gave different times. The findings are shown in Table 3.

Table 3: Time of pursuing LIS N= 137

Educational stage	First-year students		Final-year students	
	Frequency	%	Frequency	%
University	40	56.3	29	43.9
Other (s)	19	26.8	28	42.4
At high school	8	11.3	7	10.6
University & high school	4	5.6	2	3.0
At primary school	0	0	0	0
Total	71	100	66	100

The table 3 show that the majority decided to study LIS at university; 40 (56.3 %) of first-years and 29 (43.9%) of final-year respondents. Others did not indicate when they decided to study LIS; 26.8% and 42.4% respectively. Eight (11%) of first-year students and seven (10.6%) of final-year students chose to study LIS in high school. No one decided to study LIS at primary school. However, there are individuals who indicated that they decided at high school and university; that is, 4 (5.6%) of first-year and 2 (3.0%) final-year respondents.

The results revealed above could mean that students became familiar with LIS during their high school education, hence the majority decided to study LIS at university. The results could also mean those students were not surrounded by LIS professionals in their communities, hence careers are usually chosen before enrolment into higher education.

5.3.3 Factors influencing students to enrol in the LIS programmes

The literature (Gottfredson, 2002) and Hodges and Karpova (2010) reveal that career choices are influenced by several factors. In this study, respondents were asked about factors that had influenced them to choose LIS. The purpose of this question was to establish who or what made them enrol for LIS. This question was both closed and open-ended. Table 4 shows the findings.

Table 4: Factors influencing students to enrol into LIS N=71

Motivating/influencing factors	First-year students	
	Frequency	%
Information brochures	16	22.5
Other(s)	11	15.5
Relatives and information brochure	8	11.3
Relatives	7	9.9
Teacher	7	9.9
Friends	6	8.5
Parents	5	7.0
School mates	3	4.2
School mates, friends and information brochure	3	4.2
Teacher and information brochure	2	2.8
Relatives, friends and information brochure	2	2.8
Friends and information brochure	1	1.4
Total	71	100

The majority of first-year students 16 (22.5%) indicated that they were influenced by the information brochures, 11 (15.5%) were influenced by other factors; 7 (9.9%) were influenced by teacher (s) and relatives. Only 6 (8.5%) of respondents were influenced by friends and 5 (7.0%) were influenced by their parents. Three (4.2%) indicated that they were influenced by their schoolmates. There are respondents that were influenced by more than one factor. Eight (11.3%) of the respondents mentioned that they were influenced by relatives and information brochures; 2 (2.8%) were influenced by both teachers and information brochures; another 2 (2.8%) respondents indicated that they were influenced by schoolmates, teachers and information brochures. One respondent indicated that they were influenced by friends and information brochures. Table 5 shows results obtained from the final-year respondents.

Table 5: Factors influencing students to enrol into LIS N = 66

Motivator (s) / Influencers	Final-year students	
	Frequency	%
Relatives	16	24.2
Information brochure	14	21.2
Teacher	7	10.6
Parents	6	9.1
Friends	6	9.1
Other(s)	6	9.1
School mates	2	3.0
Relatives and information brochure	4	6.1
School mates, teacher and information brochure	3	4.5
Friends and information brochure	1	1.5
Teacher and information brochure	1	1.5
Total	66	100

The table 5 shows that 16 (24.2%) of final-year respondents were influenced by their relatives, closely followed by 14 (21.2%) respondents that were influenced by information brochures. Seven (10.6%) indicated that their high school teachers had motivated them to enrol for LIS. There were 6 (9.1%) final-year respondents who indicated that they were influenced by their parents, 6 (9.1%) by friends and another 6 (9.1%) by other factors. Two (3.0%) indicated that they were influenced by schoolmates. However, there are some respondents that were influenced by more than one factor. They were influenced by a combination of schoolmates, teachers and information brochures 3 (4.5%). There are respondents who mentioned that they were influenced by both relatives and information brochures (4 (6.1%)). The respondents that were influenced by both teachers and information brochures were 1 (1.5%). One respondent indicated that they were influenced by friends and information brochures.

An open-ended question was asked to allow respondents to state other motivating factors that were not listed in the closed-ended question. The main responses are presented below:

- "I was reading 'Nothing but the truth' in Grade 12 as a novel and the main character was Sipho, who was a library assistant, so that is where I started to love library work."
- "Students from different universities [came to my school] during my career expo camp, while I was doing my Grade 12 high school. "
- "I used the CAO [Central Applications Office] form and enrolled after seeing it. Actually, I had 25 points or so to qualify. I knew my points were beyond that, so I just applied. "
- "I was motivated by my community background. Growing up in a community that lacked information made me want to take a stand on changing its landscape [situation]. "
- "I was not accepted for the degree that I was willing to study, and I got information about LIS and I filled in the change of mind form and I found myself enrolled for LIS."
- "My brother-in-law actually stated that I should do LIS because it has a lot of opportunities and he also works at the Department of Arts and Culture. He has more knowledge, he explained everything to me. "

The results indicate that first and final year students were influenced by different factors. First-year students indicated that they were influenced by the information brochures. Followed by teachers and relatives. On the other hand, final-years indicated that they were influenced by their relatives and information brochures. The difference in career influences of first and final-year students is that relatives appeared to be the most influencing factor for final-year students. The results revealed that parents had less impact on the students' decisions to enrol in the LIS programme.

5.3.4 Applications to LIS

Respondents were asked to indicate whether they had applied to study LIS during their application processes. Figure 5 shows the result. N = 137

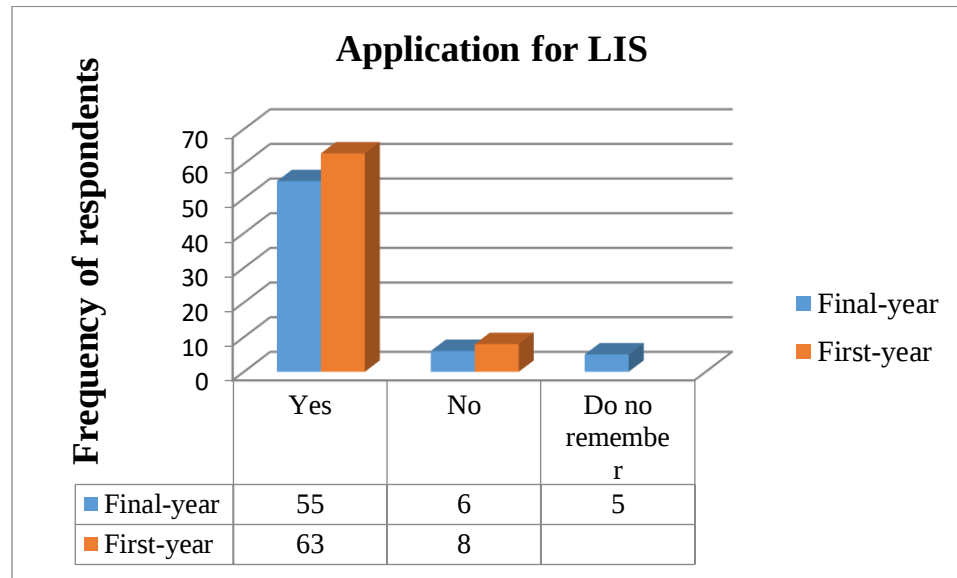


Figure 5: Applications to LIS

The application for LIS was higher from both levels. The majority, 63 (46%) of first-year and 55 (40.1%) of final-year respondents indicated that they did apply to study LIS, whereas a minority, 8 (5.8%) of first-year respondents and 6 (4.4%) of final-year indicated that they did not apply, and 5 (3.6 %) of final-year respondents stated that they don't know or remember whether they applied or not.

The above results indicate that students applied for LIS. The majority from both levels applied to enrol for LIS at university. The results reveal that only a small number did not apply. Others do not remember whether they applied or not.

5.3.5 Choice number given to LIS during application

Respondents were also asked to indicate what choice number they gave to LIS when they applied. The responses are shown in Figure 6. N=137

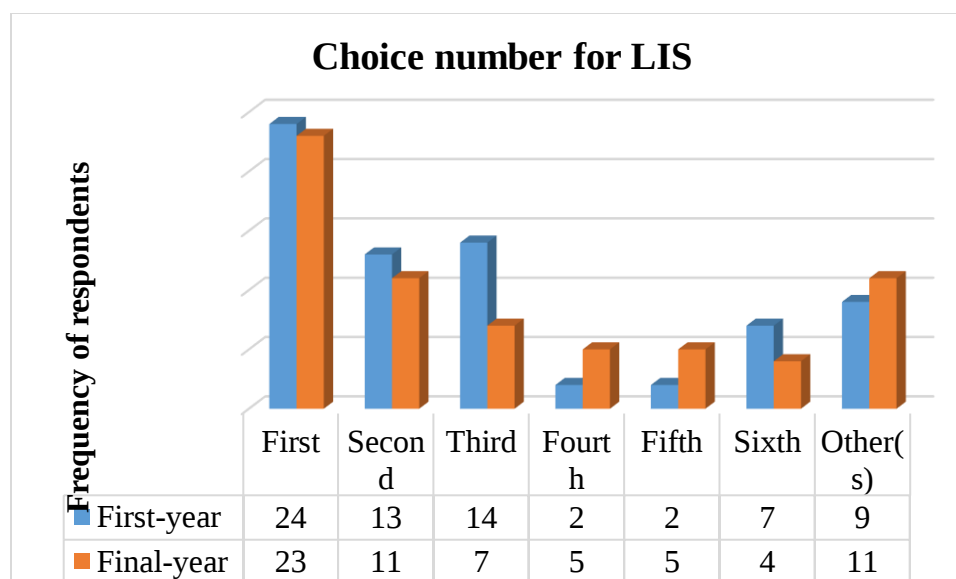


Figure 6: Application choice numbers for LIS

The results indicate that 24 (17.5%) of first-year and 23 (16.8%) final-year students chose LIS as their first choice. 13 (9.5%) of first-year respondents and 11 (8.0%) of final-year indicated that LIS was their second choice, whereas 14 (10.2%) of first-year and 7 (5.1%) final-year students made LIS their third choice. Fourth and fifth choices had similar responses of 2 (1.5%) of first-year and 5 (3.6%) of final-year respondents who applied for LIS as their fourth choice and fifth choice. Only 7 (5.1%) and 4 (2.9%) indicated that they had made LIS their sixth choice. Some respondents 9 (6.6%) and 11 (8.0%) did not respond to this question. These results indicate that most students applied to study LIS, although not all of the students made LIS their first career choice. The result also reflects that there are students who did not indicate their choice number.

The next section looks at the perceptions of students about the LIS programme. It also includes questions on satisfaction and dissatisfaction with the programme.

5.4 Students' perceptions of LIS programme

The respondents were asked to describe their understanding of LIS, that is, the first time they heard about LIS. This section had both closed and open-ended questions which allowed respondents to give their perceptions and responses without restrictions.

5.4.1 Perceptions of students before enrolment in LIS

The respondents were asked to describe their understanding of LIS when they first heard about it. The question sought to understand their perceptions before enrolling for the course. The responses are listed below according to the respondents' group. The following main responses were provided by first-year students:

- "I thought LIS was a profession which enables someone to work in the library only."
- "When I first heard about LIS, I thought it was the qualification one needs in order to work in a library. "
- "I thought it was only about working at the library with books."
- "I thought it was about the libraries and when one is done studying it they can only work at the library."
- "I thought it was for training to become a librarian."
- "I thought it was a bridging course to be a librarian."
- "I thought LIS was just a career that was all about working in the library and becoming a chief librarian, but since studying LIS at DUT I have found more information about it."
- "Before, I thought this course was about working at the library only as a librarian. "
- "I thought we could only work in libraries, but when I googled it, I discovered there was more to it."
- "I thought it was only about the library, but when I came here, I discovered it has a lot of job opportunities."
- "I thought it was only about working with books in a library, shelving them and stamping them."
- "It was all about shelving the books. "
- "I thought LIS was about sorting books and writing books as well as publishing books."
- "I thought it was about stamping and shelving books in a library. "
- "I thought it was an easy course and it was just sitting on the computer "
- "I thought it deals with computers mostly where you have set up policy managing libraries."
- "I thought it was about telling people to stop making noise in a library."
- "I assumed it was a career only for people who wanted to work in libraries."

- “I thought it was about collecting information like books and supplying them to libraries”
- “I thought it was a science like physical science.”

The following responses were given by final-year respondents.

- “I was curious to know what LIS taught in the programme since I only thought in the library they only stamp books.”
- “I didn’t know anything about LIS. I only started doing my research after I was given a firm offer. ”
- “I had no clue what it entailed, all I knew was that it had something to do with the library, as its name indicates.”
- “I figured it was a good programme because it would allow me to pursue my love of books.”
- "I thought it was a field or program that was more concerned with computers and computing."
- "I thought it was something like Information Technology. With my history in IT, I enrolled thinking I would be doing Information Technology."
- "Just stamping books and telling patrons to be silent."
- "I thought it was about working in the library and performing all the duties regarding the library."
- “I had no perception of LIS since I heard about it after registration."
- "I did not know what the course was about. I kept asking myself if this was really what I wanted because I had no one to actually explain to me what the course was all about."
- "I didn’t know anything about LIS; I only started doing my research after I was given a firm offer."
- "I thought LIS was for white people and deals with the computer."
- "I was familiar with LIS when I was in high school. “I used to work with my school librarian as a volunteer. That’s where I became aware of the career and developed a love for it.’

The responses above show that there were a variety of opinions. Many students indicated that they thought LIS was only a profession that involves reading books in the library and stamping them

for library users. Some of the respondents indicated that they thought LIS was about library operations and the training of librarians. However, there were respondents that had no idea of the profession when they heard about it for the first time; others thought that it was an IT programme. Two respondents have indicated that they thought it was a profession for white people.

5.4.2 Students' understanding of LIS after enrolment

The respondents were asked to describe their understanding of LIS after they had been enrolled in the programme. The purpose of this question was to examine whether the respondents' understanding of LIS had changed or not after enrolment. This question was analysed according to the levels of study. Respondents were asked to express their views regarding the profession after enrolment. This was an open-ended question.

The following selected responses were from first-year students:

- “This is all about the study of libraries. ”
- “I think it is all about library work and how to collect and retrieve information from the library.”
- “It is all about working in the library at different levels provided in the libraries. ”
- “Right now, I think LIS is a course that will enable me to be closer to what I want; giving out information to all resources and to people at different levels and I want to go to the archives and follow my dream or research African history. ”
- “LIS is about working with people, helping them to find information they need. ”
- “LIS is all about arranging records in a library. It is where you provide information that library users need. ”
- “Retrieving and giving information to the public and also becoming a librarian. ”
- “I think it’s all about helping people to get about making sure of what they need?”
- “I think there's so much more to LIS than what people think. It’s not only about books but all items in the library. Most importantly, libraries build communities. ”
- ‘LIS is about serving in different dynamics, not necessary to working in a library. It’s a very broad career. It doesn’t limit one. ”
- “I'm still not too sure. Perhaps I should do a little bit of research.”

The following selected responses were provided by final-year students:

- It is about finding the right information to help our users and also encouraging people both young and old to read for themselves. "
- "Nice profession, information agency, we create information, we get people to be involved in information. "
- "It about cataloguing, library system retrieving data and library management. "
- "There is a whole lot besides working in the library."
- "Information management, organising and control. "
- "I think it is all about a career that involves a lot of things, such as working as a librarian, library manager, and assistant lecturer, researcher in any field, school librarian and so forth."
- "It's about the library; knowing everything helps build a library and a community while serving them successfully."
- "Now, I think it is information based; creation, storage, sharing, using, dissemination and distribution. It is basically about how to create and monitor all those processes."
- "LIS is a multidisciplinary field that has more opportunities and it's important to society and to the country at large. "
- "I think LIS is about working at the library assisting users with information of their choice. I think it is a good qualification. "
- "It is an interdisciplinary or multidisciplinary field that applies practice, perspectives and tool management, information technology, education and other areas of libraries."
- "It is about library management, developing a collection that will be effective for the community where it is located. Ensuring that the library meets the information needs of its patrons."

The students' responses are quite similar. Both first-year and final-year students appear to have a similar understanding of the profession after enrolment, although there are first-year respondents who still do not understand the profession. They indicated that they currently think LIS is all about the creation, searching and retrieval of information. Some of the respondents pointed out that LIS is a multidisciplinary profession, since individuals can aid in any work environment where there is a use of information. There are respondents who mentioned that the profession is about cataloguing library collections, management of information, making it accessible by the

community and being able to meet their information needs. These responses show that respondents have a clear understanding of the profession after enrolment. This could indicate that they have gained more knowledge and understanding of the profession after enrolment.

5.4.3 Students' satisfaction with LIS

Respondents were asked whether they were satisfied with the LIS programme. The questions were both closed-ended and open-ended. The results are shown in figure 7. **N =137**

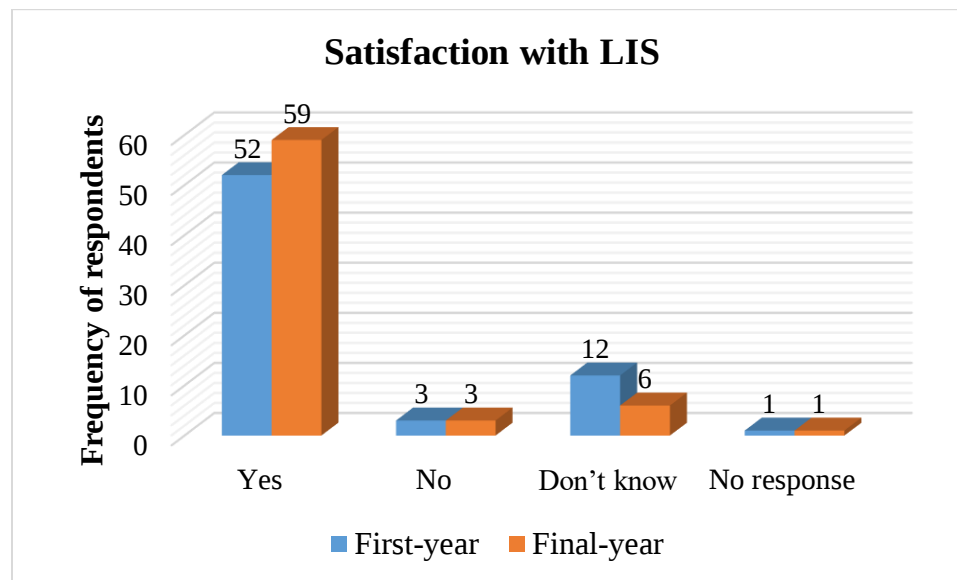


Figure 7: Satisfaction with LIS programme

The results show that the majority of respondents indicated that they are satisfied with LIS. The findings show that the majority of respondents are well satisfied with the course. 52 (37.9%) first-year and 59 (43.1%) final-year respondents indicated that they are satisfied, followed by 12 (8.8%) of first-year and 6 (4.4%) of final-year respondents who do not know. However, the minority, which is 3 (2.2%) of respondents from each group, indicated that they are not satisfied with the course. A single 1 (0.7%) from both levels did not respond. This means 81% of the respondents are satisfied with the LIS programmes they are enrolled in.

In addition, respondents were asked to state the reasons for their satisfaction and dissatisfaction with LIS. The responses are shown below:

First-year student's reasons for satisfaction

First-year student's reasons for dissatisfaction

- 'I'm happy that I'm enrolled for the LIS course because I realise that I will not depend on one position for my occupation, like being a teacher. "
- "I'm happy because I'm doing what I love, and this gives me more opportunities in the future."
- "LIS has taught me how to search for information and it has several job opportunities. You can be a lecturer, information specialist and other information-related jobs. "
- "I'm happy because I'm starting to understand LIS better and feel like it was something that was made for me to do because I'm enjoying it."
- "Yes, because I've learnt more about LIS. Now I can be able to do education and teach LIS to develop others' knowledge [and I] can also become a librarian who is successful. "
- "Yes, because being a librarian or working at the library is what I was willing to be or to work at. "
- "Yes, I'm happy about LIS because one can work in different sectors in an information environment. "
- "I'm not happy because I don't know much about it. I have researched about it, but I don't have that much information."
- "Well, I'd say no, because law is something I really wanted to do, but I didn't apply here in Zululand; I applied at UKZN. For the time being, I'm not sure how I feel about LIS."
- "I applied for it to get into university and I'm still not happy."

Final-year students' satisfaction

- I'm happy it offers a lot and gives me options and stuff. "
- "It is what I have always been longing for. "
- "It is a career with a lot of opportunities. "
- "I've learned a lot and now I know LIS is not about stamping books or shelving."
- "It has taught me much and made me change my perceptions of what the LIS course is all about. It is quite interesting. "
- "Because from a very young age I have always loved reading books. "
- "I am happy about the program because when I was in the first year I didn't know what to expect about the program, but as time went by, I had a clear picture of what was expected of me.

- “As someone who wishes to be [an] information specialist, this LIS program seems to meet my expectations. ”

Others were not sure if they were satisfied or dissatisfied with LIS. They responded as follows:

- "It is just because I don't know whether this degree has employed many people or not, since I don't know someone who did this course. "
- "I'm not sure if I enjoy the course or not, but all I know is that I will enjoy it as time goes and if it does not involve calculations."
- "I don't know much about the course and there are certain things I don't understand, but I'm sure later on I will."
- "I think it is hard because there were few people who knew about it."
- "To be honest, at this moment I'm still not sure whether I'm happy or not. "

The above verbatim responses indicate that there are satisfied and unsatisfied respondents. Some of the responses were quite similar; while other were considerably different. The majority stated that they are satisfied because of the availability of career opportunities in LIS. They mentioned that one would not depend on a single employment position. The love of reading books also has an impact on respondents' satisfaction. In addition, there are dissatisfied respondents. One of the respondents from the first-year indicated that he/she was not satisfied with the programme. The reason for this is that they have done some research on the programme but are still confused. One mentioned that they applied for LIS just to secure a space at university. Another respondent had a similar response; the respondents indicated that they still wanted to study law.

5.4.4 Recommendation for others to enrol in LIS

The respondents were asked whether they would recommend that others study LIS. Figure 8 provides the responses. N=137

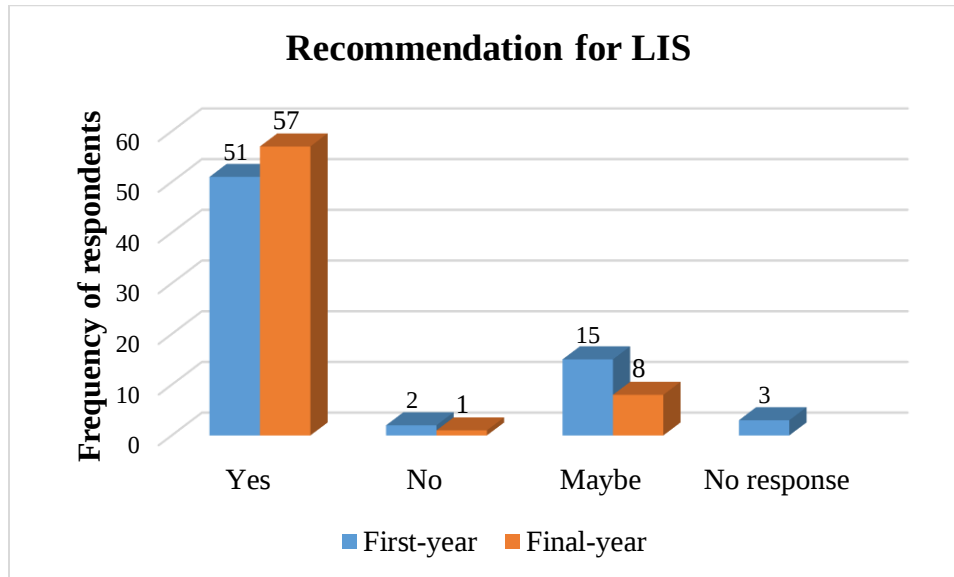


Figure 8: Recommendation of LIS to potential students

The respondents were asked whether they would recommend LIS to other people to study. Based on the results above, the majority of 51 (37.2%) of first-year and 57 (41.6%) final-year respondents indicated that they would recommend the programme to other people. Fifteen (10.9%) first-year and 8 (5.8%) final-year respondents indicated that maybe they could recommend LIS to others. A minority of 2 (1.5%) and 1 (0.7%) indicated that they would not recommend LIS to other people; only 3 (2.2%) did not respond.

Respondents were then asked to indicate their specific reasons for recommendation and non-recommendation of LIS courses. The responses as stated are shown below.

First-year students' responses for recommending LIS to others

- “Because LIS is a good course to do. It teaches one a lot. There are many job opportunities pertaining to this course.”

- “Because LIS is actually an interesting course. Yes, it is not easy nor difficult, but interesting, and job opportunities are too many. Librarians are needed. ‘It’s a nice and good course, but we need a qualified librarian.’
- “Because, South Africa is regarded as a well-educated country, so I think this could equip them.”
- “We all know that in our country there's a lack of job opportunities, so this course is suitable because it creates many opportunities for you.”
- “Yes, I would recommend other people to enrol in the LIS programme because it can decrease the number of those who stay at home with their degrees.”
- “I guess, it’s because it's not really advertised or put out there as much. I mean, I didn't know you had to get a degree to be a librarian.”
- “It is a good programme some people do not know about, so I can give them more clarity about it.

Reasons for not recommending LIS to others

- “I don’t know whether I should tell them since I am not sure of [job] opportunities" "
- As I said before, LIS is facing a shortage of work opportunities, so I can't recommend it to others. ”
- Because people must choose what they like. I can't tell a person to do LIS. I can tell him/her about it, then it will depend on him/her either take it or not. ”“
- Everybody got their choices, so anybody can choose whatever field and it is none of my concern. "

Final-year student’s reasons for recommending LIS to others

- "People need to know about the library, and the notion that the municipality accepts people with a Grade 12 and without a diploma is wrong, so more people need to have a qualification."
- “I would definitely recommend the program because it will give a clear picture of what librarianship is about."

- “I will recommend them since the degree have plenty of job opportunities and also there are many librarians needed in the country.”
- “There is a shortage of librarians in South Africa.”
- “It is a great choice for people who are interested in theory and reading books. It is a good program for people who like reading.”
- “Because it is a good course, many people do not know about it, so, there are many job opportunities and it is a broad course one can choose a field to focus on.”
- “Because this programme motivates students about the importance of reading and also the dissemination of information you have to other people.”
- “Due to the fact that we need qualified individuals to effectively run the library. Most librarian assistants have only a matriculation, which is undesirable because they lack comprehensive knowledge of librarianship. ”

The students stated that they would recommend LIS anybody interested in studying it. The students highlighted that LIS has job opportunities and educated librarians are needed in the profession since employers hire people without LIS qualifications. Other respondents indicated that they would definitely recommend LIS since it is not well-known to other people.

The students’ awareness of LIS profession, the job LIS market and their career preferences are presented in the section.

5.5 Students' awareness of LIS career opportunities

The availability of career opportunities is one of the major determining factors for individuals to enrol in any field of study. Therefore, this section sought to determine the awareness of career opportunities from respondents as well as their perceptions of LIS employment market. Both open-ended and closed-ended questions were asked.

5.5.1 Awareness of LIS careers

Respondents were asked about their awareness of LIS career opportunities. This question aimed to determine if LIS students were aware of the careers that the field offers. The findings are presented in Figure 9. **N = 137**

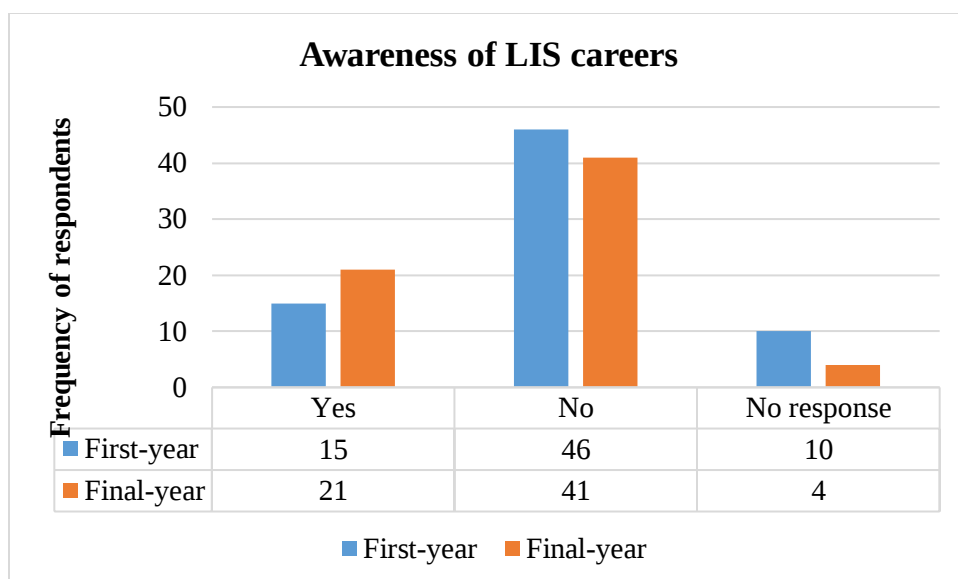


Figure 9: Students' awareness of LIS careers:

The results show that 46(33.6%) of first-year respondents and 41 (29.9%) of final-year respondents are unaware of LIS career opportunities. Fifteen (10.9%) of first-year students and 21 (15.3%) of final-year respondents indicated that they were aware of LIS career opportunities. Ten (7.3%) first-year and 4 (2.9%) final-year students did not respond to the question. The results show that the majority of students at both levels were not aware of LIS careers. A small number of respondents indicated that they were aware.

5.5.2 List of LIS careers by respondents

Respondents were then asked to list all LIS career positions they know. The table below provides the responses from both final-year and first-year respondents. The respondents' responses were analysed separately. The following table (Table 6) provides the results that were gathered from first-year respondents.

Table 6: List of career position by respondents N=71

First-year students	
LIS career listed by respondents	Frequency
1. Librarian	47
2. Library director /Chief librarian	17
3. LIS Lecturer	10
4. Archivist	10
5. Information specialist	10
6. Library assistant	10
7. Assistant librarian	10
8. Subject librarian	6
9. Record management	5
10. Teacher	4
11. Receptionist	4
12. Researcher	4
13. Information technology	3
14. Cyber cadet / System librarian	3
15. Museum librarian	2
16. School librarian	2
17. Library attendant	2
18. Writer (journal and documentary)	1
19. Historian	1
20. Cataloguer	1
21. Information management	1

The librarian position was mentioned by the majority of first-year respondents. It was followed by chief librarian and library director positions. The positions of library assistant, LIS lecturer, assistant librarian and information specialist were listed by an equal number of respondents. The findings indicate that students are aware of some LIS job titles. However, there are respondents who mentioned that individuals with LIS qualification can be employed as teachers, IT specialists, receptionists and historians.

Table 7: List of career position by respondents N=66

Final-year students	
LIS career listed by respondents	Frequency
1. Librarian /school librarian /subject librarian	49
2. Record management / Document management	19
3. Cataloguer	17
4. Archive /Archivist	16
5. Information specialist / Information librarian	16
6. Library director /Chief librarian /Library supervisor	13
7. Knowledge management /Information management	13
8. LIS lecturer	10
9. Library assistant	7
10. Assistant librarian	7
11. Cyber cadet / System librarian	5
12. Data analyst / Data specialist	4
13. Researcher	3
14. Inforpreneurship	2
15. Museum librarian	1
16. Indexes	1
17. Shelves	1

18. Acquisition	1
19. Story teller	1
20. Information technology	1
21. Network specialist	1

The best-known career position listed by final-year respondents is the position of librarian, followed by records manager, which is also called document management. The Archivist, knowledge manager and library director were also listed by many respondents. Respondents mentioned that people could be employed as library assistants and librarian assistants. Researcher, cyber-cadet, museum librarian, indexer, acquisitions librarian, and storyteller positions were also listed. In addition, there are jobs that were only mentioned by a single respondent. This could suggest that a specific job does not belong in LIS or could mean it is not well known by other students.

The most commonly known career position in the LIS profession listed by both levels is the librarian position. This was listed by the majority of final-year and first-year respondents. The second position listed is records manager/document management. Cataloguing and archives positions had equal frequencies. The Library director, chief librarian, knowledge manager and information manager have also been listed by the same number of respondents. There are respondents who mentioned that one can also become a lecturer in the department of LIS. Furthermore, the results show that students have different opinions regarding LIS careers. It seems there are few respondents who do not have inadequate knowledge of LIS jobs. This could mean that something needs to be done in terms of LIS career awareness. The reason is that there are respondents who mentioned that LIS graduates can also work as receptionists, teachers, I.T technicians and historians. All these job titles do not fall under LIS. Based on the collected data, the LIS decision makers can take note of the student's career awareness.

5.5.3 Students' preferred career position in LIS

This question was asked to determine which career positions are most preferred by respondents and the reasons behind their choice. This will help in identifying which area requires more advertising in the field, since it is revealed in the literature that LIS is a multidisciplinary field. The results have been analysed separately according to the respondents' level of study. Table 8 provides a list of first-year students' LIS job preferences.

Table 8: First-year students' LIS career preferences N=71

First-year students	
Most preferable career position by students	Respondents' justification of their choices
Library director /Chief librarian	• I think it pays much better than other choices. • I like it because I think it's at the top or close to the top and it's where I would like to end-up. Chief librarians are responsible for libraries. • Although I must start by being a library assistant, I like reading and I think the salary is much better. • I think this is the best paid position in LIS.
Cataloguer	• Because I love putting things in order • Cataloguing because it is a little bit challenging • It is in demand
Librarian	• Librarian is the most educated in the library, so I want to be that kind of a person who is advanced in knowledge. • Because I am a female that is a librarian because it usually men that are librarians • I like working in a library. I like explaining and giving information to those who seek it, besides I want to inspire young people about the importance of information literacy. • It is a job that I have been dreaming about since I heard about it.
Lecturer	• I want to do a master's in LIS and become a lecturer. • Because you learn a lot.
Record management	• Because it deals with information collection and there are a lot of job opportunities • It is because I am able to record things accordingly and file them in a good manner.
Radio station librarian	• It is my dream to work in media, so I think that the opportunity
Information specialist	• It's because I like to always study new things every day. I always like to know about my country and the world.

	• Because I like sharing information and helping people understand it • Because, in information science, we study how to be information literate and how it helps in your life.
Information librarian	• It brings all the excitement about learning new things and finding information for other people.
Senior Librarian	• Because it makes me to help people and encourage them be educated.
School/teacher Librarian	• Because I like working with children and giving them information, they need • I love working with school children • I like to teach students • It does not require me to be in a library. It allows me to vary my choices and work in a vibrant environment.
Researcher	• I will not only work in one place, but in different places. I will give opportunities for people to explore and get know better
Librarian assistant	• Because I will work close to the patrons and I will communicate with them face-to-face.
Legal librarian	• I want to work in the legal field because I want to see myself as one of the legal librarians and help lawyers or attorneys

The findings in the table above indicate that first-year students would like to occupy a number of LIS positions once they graduate. It's fascinating to see that students desire a diverse range of employment options in the field of library and information science. The preference for work as a legal librarian and a radio librarian is the most intriguing. The responses made by final-year students are listed in Table 9.

Table 9: Final-year students' LIS career preferences N=66

Final-year students	
Most preferred career position by students	Reasons by respondents
Librarian	• Librarians are in charge • I love reading and want to help people with reading. • Because we were told that after this degree we would be qualified librarians • To be a librarian, is nice because it makes someone updated about everything that is happening • I like educated people since a librarian's job is to give access to information.
Cataloguer	• Because I don't have to deal with people physically most of the time. • I enjoy cataloguing. • I think I am good at it and it helps me to think.
Chief Librarian	• I would love to have my own library • I think it will put me to in a good position and enable me to help my community. • It is really challenging, which means it is interesting. • Because I want to be in charge at management of a position in the field of information.
Archivist	• I will deal with documents, not people. • Because I love to preserve items. I am passionate about history.
Circulation desk	• Because it is where I will get to interact with the patrons.
Record management	• Because I like to keep or store vital information and records of people/organisation.
Cyber cadet	• I love technology and working with computer systems that could further advance my profession

Acquisition	Because it talks about the purchase
Information specialist or information librarian	Because it motivated me on how to work with other people and also how information is disseminated
Story teller	I like to encourage reading skills to the younger ones
Information technology	They facilitate the software.

Table 9 shows the career opportunities that LIS final-year students prefer. When compared with first year students, the careers chosen are similar with only a few exceptions, for example, cyber cadet, storyteller, and IT librarian.

5.5.4 Finding out about LIS as career

This study asked respondents to indicate how they learned about LIS career opportunities. Table 10 shows the responses of first-year respondents.

Table 10: First-year students' LIS career sources N=71

First-year students		
LIS career sources	Frequency	%
Career guidance	11	15.5
University lecturer	9	12.7
Librarian	6	8.5
High school teacher	5	7.0
Relatives	4	5.6
LIS students	4	5.6
Schools open days	4	5.6
Librarian, LIS students, high school teacher and lecturer	4	5.6
Relatives and librarian	3	4.2
Career guidance and librarian	3	4.2
Relatives and high school teacher	2	2.8

Career guidance and relatives	2	2.8
Teacher and career guidance	2	2.8
Lecturer and LIS students	2	2.8
Career guidance, librarian and high school teacher	1	1.4
Career guidance, relatives and school open days	1	1.4
Other(s)	8	11.3
Total	71	100

The table 10 indicates that the majority of first-year respondents, 11 (15.5%) got information about LIS careers via career guidance. They were closely followed by 9 (12.7%) of the respondents who found out from LIS lecturers. Six of the respondents indicated that they were told by the librarians and 5 (7.0%) by relatives, LIS students, schools' open days each had 4 (5.6%) of respondents. There were respondents who indicated that they had found out from more than one source. Some of the respondents found out from librarians, LIS students, a high school teacher and a lecturer 4 (5.6%). Career guidance and librarians, relatives and librarians had a frequency of 3 (4.2%) each. The rest of the respondents also received information from two to four sources. Eight (11.3%) did not respond to this question. Table 11 presents the findings of final-year respondents.

Table 11: Final-year students' LIS career sources N= 66

Final-year students' LIS career sources		
LIS career sources	Frequency	%
University lecturer	11	16.7
Career guidance	10	15.2
Relatives	7	10.6
High school teacher	7	10.6
Librarian	4	6.1
Relatives and high school teachers	4	6.1
Career guidance, librarian and high school teachers	3	4.5
Teachers and career guides	3	4.5

Librarian and university lecturer	3	4.5
Librarian, LIS students, high school teacher and lecturer	3	4.5
LIS students	1	1.5
School open day	2	3.0
Career guide and librarian	2	3.0
Relatives and librarian	2	3.0
Career guide and relatives	1	1.5
Others	3	4.5
Total	66	100

Table 11 shows how final-year students found out about LIS career positions. The majority of the respondents 11 (16.7%) found out from the LIS lecturers. Others learned from career guidance sessions 10 (15.2%) and seven (10.6%) of respondents found out from relatives and school teachers. Librarians, relatives and high school teachers had a frequency of 4 (6.1%) each. As the selection was not limited to one option, some respondents selected two to four options. Hence, career guidance officers; librarians and high school teachers; teachers and career guidance officers; librarians and university lecturers; librarians, LIS students, high school teachers and lecturers had a frequency of 3 (4.5%) each. Only 1 (1.5%) of the respondents found out from LIS students. Two (3.0%) of respondents indicated that they had found out from school open days; career guidance officers and librarians; relatives and librarians. Three (3.5%) did not respond to this question.

The students stressed that they had received information about LIS careers from the university lecturers, career guidance officers, relatives, high school teachers and schoolmates. University lecturers and career guidance officers were indicated by the majority of students from both levels. On the other hand, students also revealed that they had received the information from more than one source.

5.5.5 Motivating factors to continue studying LIS

Respondents were asked to explain the motivating aspects that led them to pursue a LIS degree in order to better understand their reasons for doing so. The reasons that students continue to study LIS are listed in Table 12 below.

Table 12: First-year students' motivations to continue with an LIS programme N =71

Motivating factors of first-year	Frequency	%
Job opportunities	20	28.2
Work environment	11	15.5
Job opportunities and work environment	7	9.9
Job opportunity, salary and work environment	6	8.5
Job opportunity, salary, work environment and prestige	6	8.5
Other(s)	3	4.2
Job opportunity and salary	3	4.2
Salary and work environment	2	2.8
Salary	1	1.4
Prestige	1	1.4
Prestige and salary	1	1.4
Job opportunity and prestige	1	1.4
No response	9	12.6
Total	71	100

Table 12 shows the results of the career motivation of first-year students. The majority 20 (28.1%) were motivated by the availability of job opportunities in LIS, followed by 11 (15.5%) who were motivated by the work environment. Only 1 (1.4%) respondent was inspired by the salary and 1 (1.4%) by the programme's prestige. In addition, there are respondents who were motivated by more than one factor. Hence, 7 (9.9%) of the respondents were motivated by both job opportunities and the work environment. Only one (1.4%) respondent was inspired by salary and prestige. Six (8.5%) were motivated by job opportunities, salary and the work environment, another 6 (8.5%) were motivated by salary, job opportunities, work environment and prestige. Salary and work environment had only 2 (2.8%) of respondents. Nine (12.6%) did not respond to this question.

Table 13: Final-year students' motivating factors to continue with LIS education N = 66

Motivating factors	Frequency	%
Work environment	17	25.7
Job opportunities	15	22.7
Salary	6	9.1
Job opportunity and salary	6	9.1
Prestige	5	7.6
Job opportunity, salary and prestige	5	7.6
Job opportunity and prestige	3	4.5
Job opportunities and work environment	2	3.0
Others	2	3.0
Salary and prestige	1	1.5
No response	4	6.1
Total	66	100

Table 13 shows that the majority of respondents 17 (25.7%) are motivated by the LIS work environment to continue studying LIS, followed by the availability of job opportunities 15 (22.7%). Only 6 (9.1%) of respondents are motivated by the salary. Some of the respondents are motivated by more than one factor. Six (9.1%) are motivated by job opportunities and salary. Five (7.6%) of respondents said they were motivated by the prestige of the profession, while two (3.0%) said they were motivated by job opportunities, salary, and the work environment. Only five (7.6%) said they were motivated by job opportunities, salary, and the work environment. Three (4.5%) of respondents indicated that they were motivated by job opportunities, salary and prestige, followed by a single 1 (1.5%) respondent who was motivated by salary and prestige. Some of the respondents did not respond to the question.

The responses given by respondents on career motivations showed that many are motivated by the availability of job opportunities in the LIS field. The majority of first-year respondents believed that LIS has many job opportunities, while most final-year students indicated that they like the LIS work environment. Many respondents felt very positive about job opportunities and the work

environment in LIS. One respondent from level one, which is a first-year student, and six final-year students indicated that the salary kept them motivated.

5.5.6 Respondents' perceptions of LIS job market

This question reports the findings regarding the LIS job market. The study respondents were asked their perceptions of the LIS job market. That is, do they think that there are enough job opportunities in the LIS job market? The following results were provided by first-year students. N = 71

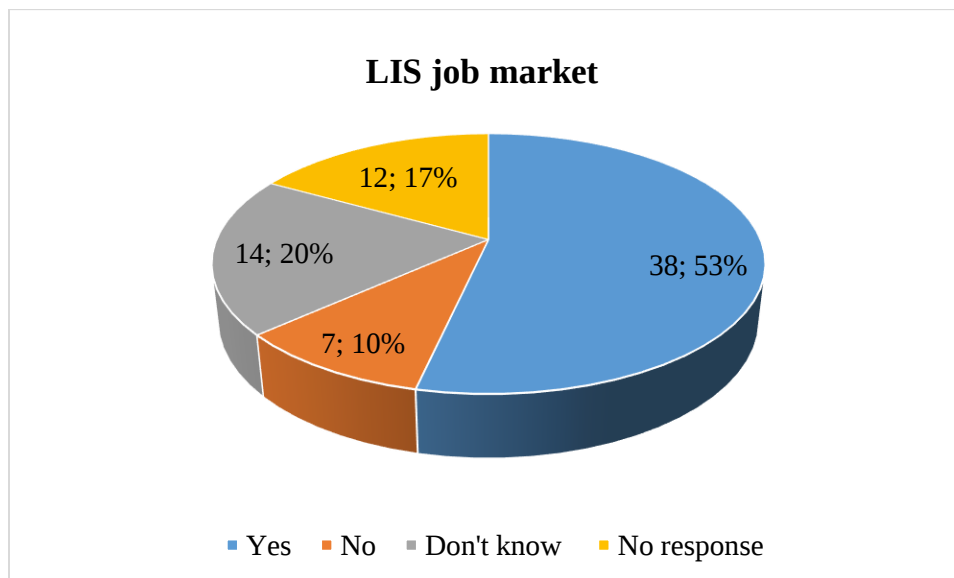


Figure 10: First-year students' perceptions of the LIS job market

Figure 10 shows that 38 (53%) of first-year respondents believe the LIS job market provides adequate job opportunities, while 14 (20%) say they are unsure and 7 (10%) say there are insufficient job opportunities for LIS graduates. Others, 12 (17%), did not respond. Respondents were asked to further explain the reasons for their choices.

Those who were positive about the job opportunities indicated that:

This course doesn't train one for librarianship only, but for other job options.

- "I never heard of anyone with a LIS degree being unemployed."
- "Yes, but I think more jobs require experience in a similar environment, which is challenging."

- ""Because there are many libraries in the country and many people are unaware of this course, the opportunities are vast.
- When I was doing my research before I entered this field, I found out that there are so many job opportunities.”
- “Because job opportunities are available in different sectors, public and private.”
- “Because, libraries are everywhere and are still growing and built so people are needed.”

First-year students who are not optimistic about the job market

- ‘There are too many people studying LIS, so there’s a lot of competition.’
- “In libraries, they employ people who don’t have qualifications for the job.”
- “I’ve never seen a post seeking information specialist.”
- “Because I have never heard of any career than being a librarian.”

First-year respondents who do not have enough information

- “In this time, I have less information.”
- “I am not sure about the average number of unemployed people with this degree.”
- “I’m still doing my research since I’m a first-year student.”
- “I don’t know much about the course and its career opportunities.”
- “I don’t know as I have not done any research about many career opportunities. ”

The results above were obtained from first-year students. The majority indicated that they are positive about the LIS job market. However, there are students who are not sure of the job market. Students indicated that they have not seen any librarian jobs being advertised. Some are concerned about the employment criteria, where organisations are employing people without LIS qualifications. The following results were given by final-year respondents.

N = 66

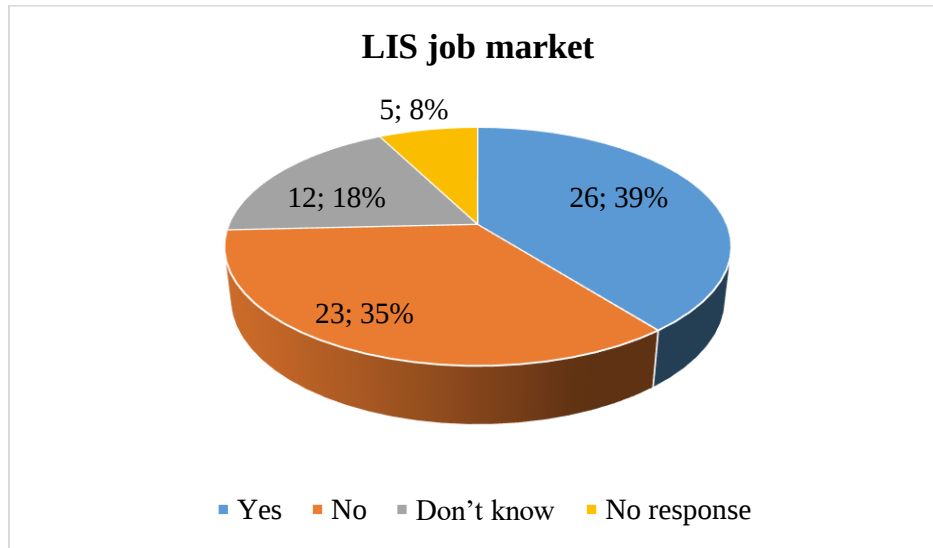


Figure 10: Final-year students' perceptions regarding the LIS job market

The majority, 26 (39%), of respondents appeared to have positive perceptions of the LIS job market. Twenty-three (35%) of respondents indicated that LIS does not offer enough job opportunities to LIS graduates. Twelve (18 %) of the respondents indicated that they did not know. Five (8%) did not respond. The respondents were asked to give their viewpoints to justify their quantitative responses. This question was asked to try to determine their understanding of the LIS job market. Reasons given for perceptions of the LIS job market were the following; these are the final-year students' responses.

Those who thought LIS has enough job opportunities stated that:

- Because of the many fields that one can work in."
- "There are so many places that do not have libraries and have opportunities to have them built."
- "Because once a person graduates, it is easier for them to find a job since there are many internships out there."
- "Because there are many people who are working as librarians"

The following responses are from respondents who indicated that the South Africa job market does not provide enough employment for LIS graduates.

- There are graduates who are unemployed.”
- “Job opportunities are limited.”
- “Because some institutions take the jobs that are meant for LIS professions and give them to matriculants.”
- “No, because there are many graduates who still have no job and there have to be more libraries.”
- “Because there are people who are unemployed due to opportunities and if they are available they require a lot of experience, whereas we don’t have much experience.”
- “Still not satisfied with permanent job opportunities.”
- “No, because there are many graduates who still have no job and there have to be more libraries”

The following responses were from the respondent who does not have enough information regarding the job market.

- ‘I don’t know how much the program is improving since it is a new program.”
- “There are many people who are working as a librarian and they are also talking about this career.”
- "I'm not sure; some say there aren't any jobs, while others say there are plenty."

The results given by final-year students, as reflected by the figure above, are quite different from the ones provided by first-year students. It is noted that the frequency of those who agree and those who disagree are somehow equal. This could indicate that final-year students have a clear picture of the job market. Students indicated that there are places without libraries and these must be built. Final-year students indicated that many graduates are unemployed due to experience being required by employers.

5.5.7 Perceptions about LIS professionals’ image in the society

Respondents were asked to express their views on whether the LIS profession and LIS professionals are getting adequate respect and recognition in society. The results were analysed at once for both final-year and first-year respondents. The findings are provided below in Figure 12.

N=137

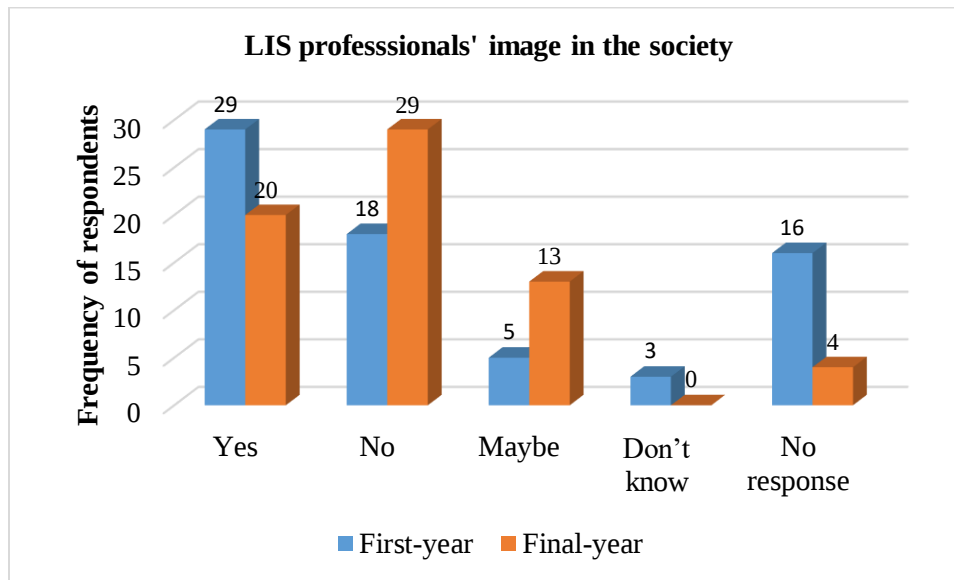


Figure 11: LIS professionals' image in society

The results in figure 12 show that 29 (21.2%) of first-year respondents indicated that they think LIS professionals are respected in society, while 29 (21.2%) of final-year respondents indicated that they do not think LIS professionals are respected by society. Twenty (14.6%) of final-year respondents indicated that the profession is respected and 18 (13.1%) indicated that it is not. Thirteen (9.5%) of final-year respondents and 5 (3.6%) respondents are not sure. They indicated that probably it is respected and 3 (2.2%) indicated that maybe it is. However, others, 16 (11.7%), and 4 (2.9%) did not respond.

Students were asked to state the reasons for their choices above. The following responses were from those who indicated that LIS is respected in society.

- Because many other fields need a library too and more information to do a research project.'
- "Everyone in the LIS profession is given the respect they need."
- "Is it the same level as other professions."
- "They are respected because they help the community."
- "They improve the skills and knowledge in society."
- "Because, they hold high values and standards and do an extremely wonderful job."
- "Mostly, because they are more doing professional jobs and work in a formal environment."

- They are generally respected, but in the library field, some people do not listen to them when they speak."
- It's because, as professionals, they outreach the community by using the library."
- "Yes, because LIS is formal is not like being police."

The following responses were given by respondents who indicated that LIS is not respected by society.

- "If you tell them [people] that you are doing LIS, they will tell you where you think you will find a job."
- "They think we don't go to university for this profession. I also thought so when I was at school."
- "People think of the librarian as a person who is just responsible for packing books that all others do not even think one should attend varsity."
- "Some people are not aware of LIS. They sometimes ask us what you guys study in the library. They take it for granted."
- "Most people are not aware of the LIS program, they don't know the importance of LIS."
- "Because so many unqualified people are working in libraries and the qualified are unemployed."
- "Librarians are not respected as people don't respect them, particularly high school students and elementary students. They are not given as much credit for their work."
- "No, working at the library lowers your confidence because people think you earn less money."
- "Because, people think librarians are not a good job and think that they get a small salary as librarians. "
- "Most of people don't know much about it that's why they don't respect it"

The following response was provided by one respondent who had no clue about the LIS job market

- "I don't know I haven't seen anyone who did the course."

The respondents have expressed their opinions regarding the image of the LIS profession in society. The responses are not the same; there are those who believe that LIS is regarded differently

from other professions. Some respondents are of the view that the profession is not getting enough respect, especially from elementary and high school learners. One respondent said that he/she always has to explain to other people where one will be employed in this profession. Another person stated that LIS is not respected because so many qualified graduates are unemployed, whereas those with matric are.

5.6 Summary

This chapter presented the data collected from two institutions, which are Unizulu and DUT. The majority of respondents were female, and the respondents were enrolled for an undergraduate diploma and a bachelor's degree. The study revealed that the respondents were unaware of LIS in high school. As a result, the majority stated that they decided to study LIS when they were at university. The finding reveals that most first-year respondents were influenced by information brochures, while many final-years were influenced by their relatives. This indicates that there is a significant need for awareness of LIS in high schools. Many respondents indicated that they had applied for LIS during their application processes, although it was not their first choice. On the respondents' perception regarding LIS, students are positive about the programme, even though at first, they were uninformed before enrolment. The reason for this may be that they were not aware of LIS before enrolment. The majority are satisfied with the programme, and many respondents indicated that they could recommend LIS to other people. However, the majority indicated that they were not aware of LIS careers at high school. When they were asked to list any LIS positions they are aware of, the librarian was listed by many respondents. This suggests that the librarian position is well-known by the respondents. The respondents stated that the job market for LIS is promising, although there are graduates who are unemployed. Graduates are competing with unqualified people. It was also shown that LIS does not receive the same level of respect as other profession in the society. The discussion of findings is discussed in the following chapter.

CHAPTER SIX: DISCUSSION OF FINDINGS

6.1 Introduction

This chapter presents the discussion of findings of the study. The study's aim was to investigate the perceptions of LIS students regarding the LIS programme and its career opportunities. The findings of the study are discussed under four topics: demographic characteristics of the respondents; the influences on students to enrol to LIS; the perceptions of students regarding the LIS programme and students' awareness of LIS career opportunities. The Circumscription and Compromise theory of Linda Gottfredson (1981, 1996) and available literature were used to discuss the findings.

6.2 Demographic characteristics of the respondents

This section discusses the demographic characteristics of the respondents, namely gender, academic levels, programme of study and the respondents' university affiliation. The results revealed that there were more female than male students. There were 84 (61%) females and 53(39%) males. The result correlates with literature from other countries that shows that LIS appeals more to females than to males. Moniarou-Papaconstantinou *et al.*, (2010), Adanu and Amekuedee (2010), Tella and Issa (2010), Taylor *et al.*, (2010), Duff, Cherry and Singh (2006), Mugot (2012), Egunjobi, Salisu and Ogunkeye (2013), Lo *et al.*, (2015), Dali and Caidi (2016) and Singh and Chander (2013) found that females dominate LIS studies. However, these results contradict Neelamma, Gavisiddappa and Kulkarni (2016), Asadullah, Esmail and Nagarajan (2012), Hamid and Soroya (2017) whose studies found that there were more males than females in the LIS field. This agrees with Newbutt (2008:51) who stated that the number of males in the profession is increasing. Consequently, this study proves that female students are more numerous than male students. Still and Wilkinson (2014) stated that indeed a larger percentage of librarians are female.

6.3 Influences to enrol into the LIS programme

The first objective was to collect data about students' awareness of LIS, their career choice influences, application to LIS, and career choice for LIS and the time when respondents decided to pursue LIS.

6.3.1 Library and Information Science awareness

Students' awareness of career choices should be taken seriously. The literature reviewed in this study reveals that LIS careers are not well recognised by individuals in society (Newbutt and Sen, 2009; Madu, Odenigbo and Tongs, 2014; Damilola, Ajayi and Adetayo, 2018). That makes young people not apply or consider studying LIS during their application processes. Career awareness goes together with career development; it is a lifelong process (Abrahams, Jano and Lill, 2015:210). Hence, the current study revealed that most students from both levels (first and final year) were not aware of LIS courses during the early phases of their education. The study found that students become aware of LIS after finishing high school 34 (47.9%) of first-year and 26 (39.4%) of final-year students. There are students who indicated that they became aware of LIS when they were already at tertiary institutions. Mugot (2012:184) states that the awareness of LIS programmes is not easily determined. This could mean LIS programmes are not well marketed to high school learners. Aghauche, Anyaegbu and Madubueze's (2015) findings support these results. They found that the majority of students (57%) came to know about LIS after being rejected from their preferred courses in higher education institutions.

It is sad to note that not even half of the students from both levels were aware of LIS at primary and high school. Similarly, Augustine, Odenigbo and Tongs (2014) found that 36% attended schools without a school library. Young people's knowledge of careers is restricted to careers to which children have frequently been exposed (Ivers, Milsom and Newsome, 2012: 234). Magnuson and Star (2000) point out that learner at elementary school become increasingly interested in careers that adults pursue. Gottfredson (2002:97) believes that learners rank careers the same way adults do. The finding is inconsistent with Aghauche, Anyaegbu and Madubueze (2015) who found that 4.8% of students become aware of LIS courses while in primary school. Gottfredson (2002:97) believes that by the age of nine a person become aware of careers. The finding could mean LIS was not on the students' cognitive map at the beginning of their career mapping and comparison.

6.3.2 Time of pursuing LIS programme

Career decisions are usually taken at high school before enrolling at higher education institutions. High schools have a significant role in helping students choose careers wisely (Baloch and Shah,

2014:547). Gottfredson (2002:97) asserts that a Grade Eight learner is able to rank different professions and decide which one they prefer. A major point in the lives of young people entails the verdicts they make while at high school (Abrahams, Jano and Lill, 2015:210). Tewell (2011:41) asserted that everyone has their specific story of how they have carefully chosen their field and when they decided to follow that specific career path. The current study found that the majority of undergraduate students decided to study LIS after finishing high school. This supports the findings of Ard *et al.*, (2006), Alansari (2011) and Taylor *et al.*, (2010) who found that LIS was chosen mostly after high school. This also confirms the results that the majority of students were not aware of LIS at high school. The results contradict a study by Shumba and Naong (2012) in South Africa who found that students' career choices were decided before the students came to university. Their study was conducted in a different South African university, where students were enrolled in different courses and not LIS. The current study only concentrated on LIS students from two universities.

Laloo (2013:44) is of the view that a minority of undergraduate LIS students slowly develop a passion for the LIS profession. The study revealed that none of the respondents decided at primary school to consider LIS as their career choices. Newbutt (2008) pointed out that negative experience as a child either at school or in a public library will do nothing to inspire individuals to think about working in libraries in the future. Alansari (2011) holds a similar view; this could mean that career counselling in schools is either not supportive of LIS as a suitable career choice or it does not exist.

6.3.3 Factors influencing students to enrol in LIS programmes

There are many factors that influence people to select a particular field of study and profession (Alansari, 2011:580). The subject literature reveals that identifying these factors would give educators, parents and industry an awareness as to where students place most of their confidence in the career choice decision-making (Borchert, 2002). An understanding of these career decisions may also help in planning programmes for students. In South Africa, students entering university come from varied backgrounds and cultures (Abrahams, Jano and van Lill, 2015:210), hence there are various factors influencing undergraduate students to choose LIS as a field of study and career.

This study found that 23% of first-year students found out about LIS from information brochures. The 23% denotes a majority. The findings are supported by a study by Shumba and Naong (2012)

who found that the second factor after family to choose a career is the ability of students to identify their preferred career choices. In this study, we assume that students went out of their way to learn about LIS from information brochures. Egunjobi, Salisu and Ogunkeye (2013) are of the view that the availability of various information sources could be the reason that students have read for themselves and made valid career decisions. Dali and Caidi (2016) stated that interpersonal interactions and the Internet are the most powerful factors in finding out about LIS. Damilola, Ajayi and Adelayo (2018) found that 70.9% of students were influenced by their personal interest in LIS. However, Adanu and Amekuede (2010) obtained different results. They found that some students were not influenced to do LIS because of their previous work experience in a library. Olawnle and Abayomi (2010) and Simon and Taylor (2011) also noted that working in the library has an impact on some people who choose to study LIS. However, this was not the case in this study.

The findings indicate that final-year students were mostly influenced by their relatives. Studies by Mtemeri (2017) and Shumba and Naong (2012) found that extended family members had a huge impact on students' career choices. In this current study parents and friends were to have less impact on students choosing LIS as career choice. Similar findings were reported by Alansari (2011) and Egunjobi, Salisu and Ogunkeye (2013), who found that parents and friends had played an insignificant role in students' career choices. Abrahams, Jano and van Lill (2015) found that students did not consider the support of teachers and family as factors that influenced their career choice decision-making. Singh and Chander (2013) had different findings. They found that friends are among the factors that influence career choices and they are ranked first. As students interact with peers and friends, they share important information on career choices (Mtemeri, 2017). This study therefore, found that two sources influenced students.

Gottfredson's (1981:251) theory of Circumscription and Compromise emphasised that a young person's career choice is an expression of the social self. One uses social criteria such as sex-type and the social status of occupations more than personal interest when choosing a career path. Occupations are organised in a cognitive map of careers and analysed according to prestige level, sex-type and interest. As young people build this cognitive map, they start to decide which careers are suitable and which are incompatible with their self-concept. The theory further expresses the

idea that parents, teachers and others encourage young people to aim higher in education and occupation (Gottfredson, 2002:97). This study does not support this assertion by Gottfredson.

6.3.4 Application to study LIS

This study found that the majority of students did apply to secure admission into the LIS programme, but others indicated that they did not apply in the first instance but applied after having been rejected from other programmes. Some do not remember whether they applied or not. Students were then asked to indicate the choice number they gave to LIS when they were applying.

6.3.5 Application choice number for Library and Information Science

The current study found that several first-year students, 24 (17.5%) and 23 (16.8%) final-year students made LIS their first career choice. This means that the majority did not. Aghauche, Anyaegbu and Madubueze (2015) found similar results in Nigeria. They found that 46% of students who applied to study LIS had made it their first choice. Egunjobi, Salisu and Ogunkeye (2013) found that 33% of students had made LIS their first course choice, but Singh and Chander (2013) found that the majority (69.3%) of applicants had made LIS their first choice.

Other students made LIS their second and subsequent choice. Ten per cent of first-year respondents and 8% of final-years indicated that LIS was their second choice. Thus 18% of students made LIS their second choice. The results are in contradiction of the findings by Egunjobi, Salisu and Ogunkeye (2013) who found that 55 (45.8%) of undergraduates' students had made LIS their second choice. Madu, Odenigbo, Tongs (2014) found that 84% of students did not choose LIS as either first or second choice. According to Gottfredson's theory of Circumscription and Compromise, individuals compromise their career choice in favour of alternative occupations that are perceived as easily reachable. There are various reasons for career compromise, e.g. a lack of knowledge of a particular career such as how to access it and other internal and external factors. Therefore, this study confirms that some of students considered LIS as an alternative career and made it their second, third, fourth, fifth and sixth choices. According to Gottfredson (1981, 1996), LIS is a compromise career profession. This is because the majority did not choose it as their first choice but as one of their subsequent choices.

6.4 Students' perceptions of LIS programme

This section discusses the perceptions of students enrolled in LIS programmes regarding the nature of the profession. Students were asked about their understanding of LIS before and after enrolling in the programme, their satisfaction with LIS and whether they will recommend that others study LIS.

6.4.1 Students' perception of LIS before enrolment

The study participants were asked to indicate what perceptions they had of LIS before the enrolment into the programme. The study sought to discover if respondents had any understanding of LIS before enrolling in the programme. Most of the respondents indicated that LIS is all about libraries and librarians; it's a course that trains individuals to qualify and become librarians. Newbutt (2008) also asked respondents the same question and found that the respondents provided valid LIS professionals' roles; that LIS professionals organise various kinds of information resources.

Others had no idea what LIS was before they enrolled. The findings are similar to Mansourian's (2010:190) who found that first-year students lack a clear understanding of LIS at the beginning of the programme. This could mean that students who did not apply to enrol for LIS had no idea what it was when they first enrolled. The results confirm Newbutt's (2008) study that library exposure has clearly not been available in some young people's lives, hence their lack of knowledge about libraries. Therefore, the current study's findings confirm the subject literature findings that some students enrol for study in LIS without understanding what the programme involves.

The study also revealed that some of the final-year students indicated that they enrolled after being exposed to libraries; hence they were surrounded by professionals who gave them a better understanding of the profession. Ard *et al.*, (2006), Adanu and Amekuedee (2010) believe that working in a library increases the probability of understanding the field. The study's overall findings reveal that some students knew about LIS before they enrolled and others had no idea what it was. Dali and Caidi (2016) found that 38 % did not know much about LIS.

6.4.2 Students perceptions of LIS after enrolment

The study revealed that most of the respondents show that they have learned more about the LIS field after enrolment. The findings show that students' enrolment in the programme had changed their perceptions of what the programme entails. Mansourian (2010:195) pointed out that when LIS educators teach students about LIS, they provide a realistic picture of the programme to students, and the students' perceptions change. This is what the study found. After enrolment, students started to understand LIS.

The majority seem to have optimistic perceptions of the programme and the profession and of themselves as future librarians and information specialists. The findings indicate that students are of the opinion that LIS is all about information processing, the creation, searching for relevant information and dissemination so that it can be easily accessible to society. The findings correspond with those of Cherry *et al.*, (2011) and Mugot (2012:184) who found that LIS is a profession that deals with access to human knowledge. LIS's traditional role is to make information accessible (Ugwauanyi and Ezema, 2010:4). Aharony (2006) found that a librarian's role is concerned with indexing, cataloguing and guiding students to reference resources.

Another major finding is that students pointed out that LIS is a multidisciplinary field; hence they would not be limited when searching for job opportunities. This supports the literature in the subject that indicates that LIS is a comprehensive field that provides a variety of employment opportunities (Gattiganur, Anandhalli and Kulkarni, 2016; Togia and Malliari, 2017, Tella and Issa, 2013), who established that there are several career prospects in LIS. Trained library professionals can find employment opportunities in various sectors of the economy. Fraser-Arnott (2016) disclosed that LIS graduates can select the type of library and information centre according to their own interest.

The study findings indicate that students have informed perceptions about LIS. It was also revealed that any negative perceptions students had before enrolling have changed. The overall responses of both groups show that their perceptions had changed during the course as they gained more information about the LIS programme. The findings show that respondents no longer thought that LIS was only about handling library books, but discovered that there is a bigger responsibility. Damilola, Ajayi and Adelayo (2018) found that 86.4% of students believe that LIS is a lucrative career. This confirms the view by Egunjobi, Salisu and Ogunkeye (2013) that undergraduates' perceptions of LIS change as students study within the programme.

6.4.3 Satisfaction with LIS

Many studies in LIS focus on job satisfaction, ignoring satisfaction with the students' programme. For example, studies by Moniarou-Papaconstantinou, Vassilakaki and Triantafyllou (2015) and Cherry *et al.*, (2011) are about job satisfaction. This study changed this situation by asking a question on programme satisfaction. It is interesting to know about the students' satisfaction with the programme because what they are taught in the lecture room they are required to apply in the workplace. Asadullah, Esmail and Nagarajan (2012) opine that the satisfaction of a professional plays an important role in the development of the employees' working conditions. The study revealed that students are satisfied with the programme. Eighty-one per cent of the students indicated that they were satisfied with the programme. This is supported by previous studies, which have indicated that both undergraduate and graduate respondents were satisfied with the LIS programmes and profession (Olawnle and Abayomi, 2010; Singh and Chander, 2013; Cherry, Freund and Duff, 2013; Gattiganur, Anandhalli and Kulkarni, 2016; Mugwisi, 2015). The respondents do not regret their decisions to pursue an LIS career path. Cherry, Freund and Duff (2013) found that students are positive about the programme. Mugot (2012) opines that LIS is an entire world in which everyone can find an interest.

The availability of career opportunities is one of the reasons students are satisfied. A great number of students from both groups believed that they would be employed in different sectors of the South African economy with their LIS qualifications. Qualified people in LIS can have employment opportunities in different sectors (Fraser-Arnott, 2016; Sinha and Pandey, 2014; Ocholla and Shongwe, 2013). Even though the findings of this study have revealed that some students are satisfied, others seem not to be satisfied. They state that they are not happy because the programme is not their preferred choice. Some indicated that, they still don't know much about the course. Mansourian (2010) had similar findings: that some of the respondents were uncertain about the programme. The findings above are in line with the Circumscription and Compromise theory. Gottfredson (1981) stated that individuals can be unwilling to commit to a career if that person is not satisfied with the profession. However, the study finds that the overwhelming majority (81%) of respondents is satisfied after joining the LIS profession.

6.4.4 Recommendation into LIS

The study asked the LIS students if they would recommend LIS to other people. The results revealed that the majority (79%) of respondents indicated that they will definitely recommend LIS to others. Only 0.02% indicated that they would not. Those who said they will not recommend LIS stated that it is because people should study what they want not be told what to study. Those who indicated that they would recommend it stated that LIS has many career opportunities. Newbutt (2006:42) pointed out that perhaps these are confident role models that can change the future of young information professionals' perceptions of the programme and encourage more learners to take LIS as a career choice.

6.5 Students' awareness of LIS career opportunities

The section discusses research questions based on the awareness of LIS careers by students. The findings of this study indicate that the majority of the students were not aware of LIS careers. The study results revealed that 64% of the students were not aware of LIS careers. The majority 46 (33.6%) of first-year students and 41(29.9%) of final-year students indicated that they were not aware of careers in LIS.

6.5.1 List of LIS careers by respondents

The study asked students what LIS career positions they know of. The study highlights the unique views of students towards job positions in LIS. The literature has indicated that LIS has a wide range of jobs in which individuals with LIS qualification can be employed (Fraser-Arnott, 2016, Ocholla and Shongwe, 2013). This study asked students to identify the types of work they can be employed in as LIS professionals. The respondents were asked to list any job position in the LIS profession; they could list as many careers as possible.

The position of librarian was chosen most by both groups. These findings are similar to those of Tella and Issa (2013), namely that respondents listed the position of librarian as a known career. Final-year respondents expressed the highest awareness of positions such as records manager, librarian, cataloguer, archivist, information specialist, library director, knowledge manager, information specialist and lecturer. These were the most listed LIS job. The results were quite different in responses from first-year students. Librarian, archivist, information specialist, library assistant, assistant librarian and library director were most identified by level-one students.

The study respondents had shown their knowledge of LIS careers; however, there are well-known LIS careers that were not listed by the current study respondents. Tella and Issa (2013) also found a somewhat different list of popular job titles. They found the following careers to be popular among students: abstracter, web designer, database manager, information broker, publisher and indexer. The difference could be the result of context and exposure to different library job titles.

These results are apparently contradictory because a majority of the students stated that they are not aware of career opportunities, yet when asked to list them, it was found that they are well aware of many LIS positions. It is not clear why this is so. The only assumption would be that students indicated that they are not aware of all LIS positions.

6.5.2 The most preferred career position in LIS

After students were asked to list careers in LIS, they were then asked to indicate their preferred career position in the LIS field. The findings revealed that library director or chief librarian was the position preferred by both groups. Students pointed out that the library director gets paid much better than others within the profession, and it is a top management position. Respondents want to be in a higher position and make a difference in the LIS profession. The responses are in line with Baruchson and Mendelovitz (2004) who found that the higher the position of the profession, the more it attracts students.

In spite of students wanting to be library directors, the study revealed that other respondents preferred to work as librarians. It seems as if the librarian position is more appealing to students, or it is just best known. Students indicated that librarians are knowledgeable, educated, in charge in the library; they aid people to access information freely and fairly. Other responses given by the students are that they were told that they would become qualified librarians after finishing their studies. The results of this study highlight the importance of knowing what the perceptions of students are towards LIS positions.

Most undergraduate students in the current study have knowledge of the areas in which they can work after their programme of study. The study findings indicate that the students have a comprehensive understanding of the available positions in LIS. Some of the career positions mentioned by respondents are: cataloguer, lecturer, information specialist, library assistant, record management, knowledge management, researcher, school librarian, archivist and information

librarian. On the other hand, irrespective of the above-mentioned career preferences; there are career positions that were only preferred by first-year and final-year students. The radio station librarian and legal specialist librarian were mentioned by first-years, whereas the storyteller, IT technician, cyber cadet career preferences were most liked by final-year students. Lo *et al.*, (2015) found that students preferred to work at academic libraries.

The findings indicate that students have an idea where they can be employed as LIS professionals. The results also reveal that there are respondents, who wanted to be in media and IT, but unfortunately external barriers existed, and the students ended-up in LIS. The findings show that respondents had to compromise their career choice and replace them with other career choices. This is in accordance with the Circumscription and Compromise theory which states that individuals can compromise an inaccessible career to accommodate external reality (Gottfredson, 2002:100). Gottfredson used the term “circumscription” in her developmental theory to describe career exploration as a process of eliminating occupational choices and substituting them with visible ones (Brott, 1993:4). The results are consistent with the view that individuals identify careers they most prefer by assessing the compatibility of different careers with their self-image (Gottfredson, 2002:91). Hence, the respondents had named their career preferences which are compatible with their self-concepts.

6.5.3 LIS careers source of information

Investigating how students found about LIS programmes is of particular importance to LIS administrators and others involved in the recruitment of intelligent individuals to the programme (Taylor *et al.*, 2010:43). Students were asked about their sources of LIS career information. The current study results reveal that career guidance and lecturers were the most significant information sources available to students. First-year students found information from career guidance interactions. It is encouraging to know that career guidance has sensitised students to LIS job opportunities, when Abrahams, Jano and van Lill (2015) found that career guidance was still an issue in South African disadvantaged schools. The authors pointed out that career guidance was largely absent amongst disadvantaged schools. In this study, it is assumed that career guidance was either done at high school for those who knew about LIS at high school or at university before enrolment where the majority decided to enrol for it.

Abrahams, Jano and van Lill Van (2015) reveal that students rated career guidance the lowest as source of motivation to enrol for a course. Most final-year students indicated that they found out about LIS careers from university lecturers. Aghauche, Anyaegbu and Madubueze (2015) found that parents, peers and information brochures were the main sources of career information. Olawnle and Abayomi (2010) stated that family and friends of students were the main information sources. Aghauche, Anyaegbu and Madubueze (2015) found that the majority (28.6 %) of students said that relatives and parents were their sources of information.

6.5.4 Career motivation factors to continue studying LIS

The respondents were asked to state the career or professional factors that motivated their decision to continue studying LIS. Fakoti (2014:668) pointed out that it is highly relevant to understand the career motivations of students for the socio-economic role of universities. The findings reveal that the most important factor that motivates the respondents to continue with the programme is employment opportunities, followed by work environment. This was revealed by both groups. Lo *et al.*, (2015) found that the work environment, being able to assist library users and career advancement were the main motivating factors for continuing to study LIS. Ameen (2011:177) pointed out that there are rising numbers of employment opportunities with the growth of education institutions in public and private sectors. Kaba (2017) found contrary results in the United Arab Emirates where most librarians believe that LIS does not have enough employment opportunities. The context of the study could be the factor that leads to different results.

It emerged from this study that other students indicated that they were motivated by the salary and prestige of LIS. Hyder and Batool (2013) pointed out that salary and the prestige of the profession are among the most important motivating elements. In this study, only a few indicated that they were motivated by salary. Gottfredson (2002:97) opines that young people understand the links between education, salary and career.

6.5.5 Perceptions of LIS job market

The necessity to understand the job market is significant to students positioning themselves within the current job market after completing their studies. Sadly, the Trading Economics (2019) indicates that the unemployment rate in South Africa is at 27.6 per cent. The question is how LIS students view future job opportunities. The study results revealed that the majority of first-year

students (53%) are positive about the job market but only 39% of final-year respondents seem to be positive. Ard *et al.*, (2006) found a high level of confidence about the job market among students. In this study, it is first-year students that are positive. Final-year students do not seem to be very positive. Ameen (2011:179) states that the LIS job market is promising for those who are competent enough to use ICTs for library operations. South African LIS students are taught ICT skills; therefore they will compete favourably in the job market.

The respondents who are positive indicated that an LIS degree opens many job opportunities. They also state that they have never heard about anyone who is unemployed who has a LIS qualification. The respondents interestingly pointed out that there are many places across the country without libraries; therefore libraries should be built to create jobs for graduates. Jain and Jorosi (2017) pointed out that LIS has a number of opportunities to equip students with the right skills for the current job market. Goodsett and Koziura (2016) state that the LIS degree does not seem to be enough, as new LIS graduates are expected to have gained experience in order to be competitive in the job market.

6.5.6 Perceptions of LIS professionals' prestige in society

The study participants were asked to indicate their views regarding the status of the LIS profession and professionals. Alansari (2011:576) asserted that the socioeconomic status of a profession is dependent on its perceived value to a society. The findings reveal that not all students believe that LIS is respected by society. Baruchson-Arbib and Mendelovitz (2004:86) pointed out that one of the important aspects of career considerations which warrants discussion is the perceived status and prestige of the profession. Gottfredson (1981) states that the profession's status, personalities of professionals, and the respect shown to that profession and professionals are important to young people who are looking for a future career. The theory's viewpoint is supported by Alansari (2011:575), who states that the societal image of a profession plays an important role in attracting new recruits. Hence, the study asked respondents their perceptions of the prestige of LIS in the society.

Students gave several reasons why they believe that the LIS profession is not respected by society. For example, they believe that limited knowledge of what LIS professionals are responsible for in society is the reason LIS is not respected, especially by elementary and high school learners. This

is in line with Batool and Hyader (2013:16) who opine that the need for information in a community determines the prominence of the librarian there. Others believe that library professionals are not considered to be educated people. Garcia and Barbour (2018:15) point out that library employee without qualification should not claim the title librarian. Students also believe that working as a librarian has a low status, since the public thinks LIS professionals are not paid well. Newbutt (2008) asserts that the title “librarian” has an effect not only on the job description but also on the prestige of the individual. This is in line with Alansari (2011) whose findings demonstrate that librarians distinguish that a lack of recognition from the public is negatively affecting the prestige of the LIS profession. Ivers, Milsom and Newsome (2012: 235) state that these professional labels may influence the career choices of future job seekers. This could be the reason Baruchson and Mendelovitz (2004) found that students prefer to be known as information scientists to gain prestige in sectors such as the hi-tech community.

The literature makes it clear that these library and librarian stereotypes are not new. Petr and Aparac-Jelusic (2002:364) point out that libraries and librarians have had a problem of society’s negative perceptions for a long time. Gottfredson (2002:88) pointed out that people also hold occupational stereotypes. Gratification regarding the inherent characteristics of the job status of employees is very important to any organisation for the success and the future existence of that profession (Ranaweere, 2018: 37). In the light of this, it is particularly imperative that the library professional focuses on being visible in the community.

6.6 Summary

This chapter has discussed the study findings and compared them with the literature. It was found that there were more female than male students. The study discovered that the majority were not aware of the LIS programme and its career opportunities. Hence, the Circumscription and Compromise theory pointed out that learners have the ability to recognise careers at an early stage. Students applied to study LIS as their first career choice, while others made it an alternative career. The majority were influenced by their relatives and information brochures. Thus, Gottfredson’s theory holds that teachers and parents play a major role in encouraging students to select certain careers. Undergraduate students have varying opinions regarding LIS perceptions and the availability of job opportunities. The majority are satisfied with the course. First-year students

were found to be more positive about finding jobs after graduating than final-year students. Gottfredson's theory highlighted that individuals choose careers that are compatible with their self-image. For this reason, the study discovered that students did not prefer an LIS career choice but were forced into it by external circumstances, thus making LIS a compromise career path as stated by Gottfredson (1981, 1996). Students were found to be aware of LIS's societal image; this supported the theory that an individual holds career stereotypes. Furthermore, it was revealed that students are willing to recommend LIS to other people, as the programme is not well known. The next chapter discusses the summary, conclusion and recommendation.

CHAPTER SEVEN: SUMMARY, CONCLUSION AND RECOMMENDATIONS

7.1 Introduction

This chapter summarises the study findings, provides overall conclusions and recommendations. The overall purpose of this study was to investigate students' perceptions about Library and Information Science study programmes and career opportunities. Its objectives were to investigate factors influencing students to enrol in the LIS programmes; students' perceptions of LIS programmes; and students' awareness of LIS career opportunities. The study was guided by the Circumscription and Compromise theory by Linda Gottfredson (1981, 1996).

The study adopted a survey design. Two South African universities, Durban University of Technology and the University of Zululand, participated in the study. Data was collected from 137 undergraduate students using survey questionnaires. Qualitative and quantitative data were collected. The quantitative data of the study was analysed using descriptive statistics and the Statistical Package for Social Sciences (SPSS) as a data analysis tool, while qualitative data was analysed through the use of contents analysis.

7.2 The main research findings are summarised by the study objective

This section presents the summary of the findings under each research objective

7.2.1 Objective 1: To investigate what influenced students to enrol into the LIS programme

The study revealed that most undergraduate students were not aware of LIS when they were at primary and high school. There are few a respondent from both groups (first and final-year students) who heard about LIS for the first time when they were at high school. The results revealed that the majority did not decide to study LIS at high school as it is expected of individuals to decide on a course of study at high school, but most decided at university, or after high school but before

enrolling at university. This suggests that LIS is not a career of choice for many young people, especially those in primary and high school.

The study revealed that the main factors influencing students to study for a LIS qualification are relatives and information brochures. Parents, librarians and teachers were found to have less influence on students' career decision. Furthermore, the study revealed that some of the students were not influenced by any factors but enrolled in the programme since they were rejected by their first-choice study options. The study discovered that most students applied to study LIS; however, the majority did not make LIS their first choice, which makes LIS an alternative choice. The above study objective was achieved as factors influencing students to enrol in LIS programmes were identified

7.2.2 Objective 2: To determine the students' perceptions of LIS programme

The study found that the majority of students from both groups initially did not have sufficient knowledge of LIS before enrolling in the programme. The perceptions of the profession and its career opportunities differed significantly for the two groups. Some students had no clue what LIS was when they first enrolled. They thought that LIS was all about taking care of books by stamping them and controlling noise in the library. Some indicated that they thought LIS was a pure science programme. Others thought it was a computer and Information Technology-related programme. The study discovered that after enrolment students' perceptions changed; after they had gained adequate knowledge. The respondents pointed out that LIS is all about library management and information creation, storage, sharing, using, dissemination and distribution, ensuring that the library meets the information needs of the community it serves. Other respondents indicated that there is more behind being a librarian.

The study findings revealed that the students' overall satisfaction with the programme is high. There were various reasons provided by respondents regarding their satisfaction. First-year students indicated that they are happy because of the vast job opportunities that an LIS qualification offers in different sectors of the South African economy; others enjoy and love the programme; and others state that they have understood more regarding the processes of information preservation. Other students indicated that they were dissatisfied with the programme because it was not their first choice. For example, one respondent indicated that they still don't

know what the course entails. The students indicated that studying towards an LIS qualification has changed their career perceptions before enrolment. The love for reading books and their individual career expectations have been met.

The study further asked respondents whether they would recommend LIS study to other people. Respondents indicated that without doubt they would recommend the course to other people. The reasons were that LIS is a good programme with plenty of job opportunities. To make it known in society, South Africa needs qualified librarians. The minority indicated that they would not recommend any LIS programmes to other people. The students believe that everybody has a right to choose their own programmes; therefore, they cannot recommend the programme to others. Students' perceptions about career opportunities available in the job market differ. The above study objective was attained; hence the study has found that students know what LIS is, they are satisfied with the programme and they would recommend it to others.

7.2.3 Objective 3: To establish the students' awareness of LIS career opportunities

The study asked students if they knew about LIS career opportunities. Students indicated that they were not aware of them, but when asked to list any career opportunities they were aware of, students listed a number of LIS career opportunities. They listed job titles such as librarian, lecturer, archivist, information specialist, record manager, knowledge manager, cataloguer, library director, researcher, library assistant, information manager, assistant librarian, writer, museum librarian, acquisitions, system librarian, teacher, historian, receptionist, indexer, data analyst, network specialist and information technologist and others. The students' responses are contradictory, because in one response they say they don't know LIS career opportunities, but when listing them, they correctly listed many LIS professional positions. It is not clear what might have caused this, but the assumption is that the question about awareness was not clear to them.

Students would prefer to occupy the following positions: library director, librarian, library assistant, lecturer, school librarian, records manager, legal specialist, researcher, information specialist, cataloguer, archivist, story teller, circulation services officer and cyber cadet. Students indicated that career guidance officers and lecturers played a huge role in educating them about these library positions.

The study findings indicate the LIS work environment and job opportunities motivate students to continue studying LIS. First-year students in particular are motivated by the availability of job opportunities, while final-year students are mainly motivated by a conducive work environment. A few students indicated that LIS has limited employment opportunities for LIS graduates. Those who are of the opinion that there are few job opportunities gave the following reasons: many people are studying LIS, so there's a lot of competition, libraries employ people who don't have qualifications for the job, they have never heard of any career other than librarian, there are graduates who are unemployed, job opportunities are limited, there are people who are unemployed due to few opportunities and if they are available they require a lot of experience; meanwhile we don't have much experience and are still not satisfied with permanent job opportunities.

The study findings revealed that the majority of first-year respondents indicated that they think LIS professionals are respected in society, while on the other hand the majority of final-year respondents indicated that they do not think LIS professionals are respected in society. The results mean that final-year students might have a better understanding and have valid reasons for this because they have been in the course for a longer period than the first-year students.

The respondents who indicated that LIS is respected provided the following reasons: everyone in the LIS profession is given the respect they deserve, LIS is on the same level as other professions, they hold high values, standards and do an extremely wonderful job, they are doing a professional job and work in a formal environment. Those who believe that LIS is not respected state that they think one does not go to university for this profession, people think of librarians as people who are just responsible for packing books, that society thinks that LIS professionals do not even go to university. Some people are not aware of LIS; they sometimes ask us what do you guys study about the library, they take it for granted, they don't know the importance of LIS, many unqualified people are working in libraries and the qualified are unemployed, librarians are not respected as people don't respect them, working at the library lowers your confidence because people think you earn less money, people think librarian is not a good job and think that they get small salaries as librarians. This might be the reason why many do not take the course during high school applications. The above study objective was achieved; the study's findings have indicated the student's awareness of LIS career opportunities and their career preference within the profession.

7.3 Conclusion

This study has focused on students' perceptions of LIS and its career opportunities. The study looked at the students' awareness of careers in the profession and what influenced or motivated them to enrol in LIS. In conclusion, the study found that a great majority of students were not aware of LIS when they first enrolled in the programme. The conclusion drawn from this is that LIS is not well recognised in society. The study indicated that few respondents had a background in the programme before enrolment. Hence, the majority decided to study LIS after finishing high school. LIS is not a dream career for many students; this is because the majority indicated that LIS was not their first career choice. The study found that information brochures and relatives were the major influences on students to enrol for LIS. Librarians were found to have less influence in influencing young people to pursue a career in LIS. It can be concluded that background has no influence on students' choice of careers.

The study found that most students indicated that they only became aware of LIS after enrolment at university. However, as they studied, they came to understand LIS. The study findings are in line with previous studies: that the students did not understand the programme at the beginning of the course; however, they liked the course after enrolment even though they first lacked knowledge. This finding suggests that those who enrolled mistakenly had developed knowledge of the programme. There are students who are satisfied with LIS and they indicated that they can recommend LIS to other people that they enrol for LIS. Even though these findings are generally compatible, there are some features in which they vary. Hence, there are students who were found to be dissatisfied with the programme and those who indicated that they would not recommend LIS to other people.

It can also be concluded that students have gained more knowledge of LIS careers. Several careers were identified by the students, based on the listed LIS job titles. The most preferred job, as indicated by students, was librarian, followed by record manager and cataloguer. It can be concluded that it is because the librarian position is the main job in LIS and it is the only job title people are familiar with. University lecturers and career guidance play significant roles in educating students about available careers. The study further discovered that students were motivated by the job opportunities and the work environment of information professionals.

It is noted that first-year students were found to be more positive about the job market than final-year students. The students felt positive because they believe that information professionals can work in various information sectors. The final-year students believe that the job market is not offering enough careers for LIS graduates. It could be that these students have started to search for future employment since they are about to finish their studies. The study further concludes that the LIS job market has a significant role in keeping the students in the programme, as reflected by the student conviction that LIS has ample career opportunities.

It can also be concluded that not all students are satisfied with the image of LIS in society. There are students who observe that LIS does not enjoy the same respect as other professions. Others showed different views, namely that LIS is not getting recognition in society, although LIS professionals are doing a great job in supporting the accessibility of information and serving society. It can be concluded from these findings that LIS is a compromise career for most students because it was not their first choice. The study found that students had relinquished their most preferred careers for LIS since it was the most accessible career.

7.4 Recommendations

The findings of the study on students' perceptions about LIS programme and its career opportunities provide the following recommendations

Recommendations to practice

- This study found that the majority of students did not know about LIS at primary and high school. The study therefore recommends that there should be LIS career awareness campaigns in public libraries, primary and high schools to sensitise students regarding LIS. This will help in recruiting students who have no LIS background.
- The study revealed that librarians had less impact on students enrolling in LIS. The study recommends that librarians in public libraries play a role in sensitising pupils visiting public libraries about LIS.
- The study found that LIS professionals are not well-respected by society compared to other professions. For that reason, there should be public awareness campaigns, especially in

public and school libraries and entire communities, to educate the population about LIS. This will help in challenging the negative perceptions of LIS.

- Information brochures were found to play an important role in LIS recruitment. LIS schools are encouraged to continue to use them for recruitment and promotion purposes because it is evident that they are effective.

Theory recommendations

- The current study was only carried out in one province of South Africa. It is therefore recommended that further studies are conducted in other provinces to enable generalisation of results to South Africa as a whole.
- In-depth interviews are also recommended in future studies to get an in-depth perception of students about LIS and its career opportunities.

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APPENDIX: 1 Ethical Clearance

**UNIVERSITY OF ZULULAND
RESEARCH ETHICS COMMITTEE**
(Reg No: UZREC 171110-030)



RESEARCH & INNOVATION

Website: <http://www.unizulu.ac.za>
Private Bag X1001
KwaDlangezwa 3886
Tel: 035 902 6887
Fax: 035 902 6222
Email: ManqeleS@unizulu.ac.za

ETHICAL CLEARANCE CERTIFICATE

Certificate Number	UZREC 171110-030 PGM 2017/394									
Project Title	STUDENTS' PERCEPTION ABOUT THE LIBRARY AND INFORMATION SCIENCE (LIS) PROGRAM AND ITS CAREER OPPORTUNITIES									
Principal Researcher/ Investigator	Sibiya TN									
Supervisor and Co-supervisor	Mr M.M Shonger									
Department	Information Studies									
Faculty	Arts									
Type of Risk	Medium risk – Data collection from people									
Nature of Project	Honours/4 th Year			Master's		x	Doctoral			Departmental

The University of Zululand's Research Ethics Committee (UZREC) hereby gives ethical approval in respect of the undertakings contained in the above-mentioned project. The Researcher may therefore commence with data collection as from the date of this Certificate, using the certificate number indicated above.

- Special conditions:
- (1) This certificate is valid for 2 years from the date of issue.
 - (2) Principal researcher must provide an annual report to the UZREC in the prescribed format [due date-01 July 2018]
 - (3) Principal researcher must submit a report at the end of project in respect of ethical compliance.
 - (4) The UZREC must be informed immediately of any material change in the conditions or undertakings mentioned in the documents that were presented to the meeting.

The UZREC wishes the researcher well in conducting research.


Professor Gideon De Wet
Chairperson: University Research Ethics Committee
Deputy Vice-Chancellor: Research & Innovation
20 September 2017

CHAIRPERSON
UNIVERSITY OF ZULULAND RESEARCH
ETHICS COMMITTEE (UZREC)
REG NO: UZREC 171110-30

20-09-2017

RESEARCH & INNOVATION OFFICE

APPENDIX: 2 Permission from Durban University of Technology



**DIRECTORATE FOR
RESEARCH AND
POSTGRADUATE
SUPPORT**

*Directorate for Research and Postgraduate Support
Durban University of Technology
Tromso Annexe, Steve Biko Campus
P.O. Box 1334, Durban 4000
Tel.: 031-3732576/7
Fax: 031-3732946*

13th December 2017

Ms Talente N Sibiya
c/o Faculty of Humanities and Social Sciences
University of Zululand

Dear Ms Sibiya

PERMISSION TO CONDUCT RESEARCH AT THE DUT

Your email correspondence in respect of the above refers. I am pleased to inform you that the Institutional Research Committee (IRC) has granted full permission for you to conduct your research "Students' perception about Library and information science and its career opportunities" at the Durban University of Technology.

The DUT may impose any other condition it deems appropriate in the circumstances having regard to nature and extent of access to and use of information requested.

We would be grateful if a summary of your key research findings can be submitted to the IRC on completion of your studies.

Kindest regards.
Yours sincerely

A handwritten signature in cursive script, appearing to read "C. Napier".

PROF CARIN NAPIER
DIRECTOR (ACTING): RESEARCH AND POSTGRADUATE SUPPORT DIRECORATE

APPENDIX 3: Letter seeking authority to conduct a study

Faculty of Humanities and Social Sciences

University of Zululand

P/B X1001

KwaDlangezwa

3886

TO WHOM IT MAY CONCERN

RE: Introducing Miss T.N Sibiya – Master’s Student at University of Zululand

This letter serves to introduce and confirm that Miss T.N Sibiya is a bona fide registered Master’s student in the Information Studies Department at the University of Zululand. The title of her research is ‘Students’ perceptions about Library and Information Science program and its career opportunities’.

The outcome from the study is expected to improve practice, inform policy and extend theory in this field of study. As part of the requirements for the award of a Master’s degree, she is expected to undertake original research in an environment and place of her choice. The UNIZULU ethical compliance regulations require her to provide proof (letter or email) that the relevant authority where the research is to be undertaken has given approval.

We appreciate your support and understanding to grant Miss T.N Sibiya permission to carry out research in your organisation(s). Should you need any further clarification, do not hesitate to contact me: 0717797815 or talentesibiya@gmail.com

Thank you in advance for your understanding

Yours sincerely,

Mzwandile Shongwe (supervisor)

Department of Knowledge & Information Stewardship ,University of Cape Town.

Tel: 0359026820) or email: mzwandile.shongwe@uct.ac.za

APPENDIX 4: Participant informed consent letter



Informed Consent Letter

Dear Participant

My name is Talente Sibiya I am a Master's (Library and Information Science) candidate studying at the University of Zululand, KwaDlangezwa Campus. The title of the research is: **Student's perceptions about Library and Information Science programme and its career opportunities.**

You are kindly asked to participate in this study. You are informed that your involvement in this study is voluntary. You are not forced to disclose your information and privacy is guaranteed. You may withdraw from the study at any time you wish. The researcher will treat the information you provide as confidential. You will not be identified by your personal information in any document, including in the research report.

Please note that:

- The information that you provide will be used for scholarly research only.
- Your participation is entirely voluntary. You have a choice to participate, not to participate or to stop participating in the research. You will not be penalised for taking such an action.
- The questionnaire will take about 10 to 15 minutes.
- If you agree to participate please sign the declaration attached to this statement (a separate sheet will be provided for signatures).

Contact Details:

Email: *talentesibiya@gmail.com*

Cell: 071 779 7815

My supervisor is Dr. Mzwandile Shongwe, who is located in the department of Knowledge Stewardship, University of Cape Town

Email: mzwandile.[shongwe@uct.ac.za](mailto:mzwandile.shongwe@uct.ac.za)

Phone number: 0359026820

Please indicate your consent to participation in this study by signing this form.

Participant's consent

Surname and Initial(s).....

Signature.....

Date.....

Thank you for your contribution to this research.

APPENDIX 5: Questionnaire for participants

Student's perceptions of the Library and Information Science (LIS) programme and its career opportunities in South Africa

Dear participant

I am Talente Nokukhanya Sibiyi, a Master's student in the Department of Information Studies at the University of Zululand. My supervisor is Mr Mzwandile Shongwe. We are conducting a study on students' perceptions about the Library and Information Science (LIS) programme and its career opportunities. The objectives of the study:

- To investigate what influenced students to enrol for LIS
- To find out if students are aware of LIS career opportunities
- To investigate the student's perceptions about the LIS programme

You are kindly asked to participate in this study by filling in this questionnaire. Please note that your involvement in this study is voluntary and your information and privacy are guaranteed. You may withdraw from the study at any time you wish. The researcher will treat the information you provide as confidential. Should you have any queries about the research, you are welcome to contact the researcher or the supervisor. Details are given below.

1. Demographic information

Section one captures your demographic details. Please tick the most suitable answer.

a. Gender

Female	☐	Male	☐
--------	--------------------------	------	--------------------------

b. Please indicate your level of study.

First-year student	☐
Final-year student	☐

c. Which of the following qualification are you registered for? Please choose only one option.

Undergraduate diploma	☐
Undergraduate degree	☐

d. Please indicate your university

Durban University of Technology	
University of Zululand	

2. Influences to enrol in the LIS programme.

Section two captures data about students' influences to enrol into the LIS program. Please tick as many options as possible.

a. When did you first know about LIS? Please choose as many options as you like

At primary school	
At high school	
After finishing high school	
At university	
Other (please indicate)	

b. When did you decide to pursue an LIS career? Please choose as many options as you like

At primary school	
At high school	
After finishing high school	
At university	
Other (please indicate)	

c. What motivated you to enrol in the LIS program? Please choose as many options as you like

Family	
Friends	
School mates	
Teachers	
Information brochures	
Other (please indicate)	

If your choice is other above, please elaborate how you found yourself in the LIS program

d. Did you actually apply for the LIS programme when you were applying to university?

Yes	
No	

If your answer is no, please indicate who applied for you. You can choose as many options as possible.

Family	
Friends	
School mates	
Teachers	
Other (please indicate)	

If your answer is Yes above, what application choice did you give the LIS program? Please select one option.

First	
Second	
Third	
Fourth	
Fifth	
Sixth	

3. Students' perceptions of the LIS programme

Section three captures data about the students' perceptions about the LIS programme, that is, their thoughts about the programme.

a) When you first heard about the LIS program what did you think it was all about?

.....

b) When you enrolled for it, what did you think it was all about?

.....

c) At the moment, what do you think LIS is all about

.....

.....

d) At the moment, are you happy that you enrolled for the LIS program?

Yes	
No	
I don't know	

Please explain your answer above

.....

.....

Would you recommend other people to enrol for the LIS program?

Yes	
No	
I don't know	

Please explain your answer

.....

.....

4. Student's awareness of LIS career opportunities

This section is about students' awareness and perceptions about LIS career opportunities.

a) Please list all the career opportunities that you think are available in the LIS field

.....

.....

b) Which LIS career(s) do you like the most?

.....

.....

Please explain why you do like your choice above

.....

.....

c) How did you find out about LIS careers? Please choose as many as you like.

From career guidance	
----------------------	--

From relatives	
From information worker(s) or Librarian	
From university or high school open day	
From LIS student	
High school teacher(s)	

Other, please specify

.....

.....

- d) Which of the following career factors motivates you to continue to study LIS? Please choose as many as you like

Availability of job opportunities	
Salary	
Work environment	
Prestige	
Other	

If your choice is Other above, please explain your answer

.....

.....

- e) Were you aware of the LIS career opportunities at high school?

Yes	
No	

If your answer above is no, when did you know about LIS career opportunities?

.....

.....

- f) Do you believe that the LIS job market offers enough career opportunities for LIS graduates?

Yes	
No	
Don't know	

Please explain your answer

.....

g) Do you think that LIS professionals are respected by people in other fields?

Yes	
No	
Don't know	

Please explain your answer

.....

End!! Thank you so much for your time

APPENDIX 6: Letter from the editor

Declaration

Dr Ian Robin Raper
rosslyni@lantic.net
078 761 2241
17 Sabi Road, Selcourt, Springs 1559

To whom it may concern

I hereby declare that I have comprehensively edited the master's dissertation to be submitted to
the University of Zululand by

Talente Nokukhanya Sibiya

(Student Number 201243825)

Title:

Students' perceptions about the Library and Information Science (LIS) programme
and its career opportunities

In Information Science at the Department of Information Studies,
University of Zululand.

Supervisor: Dr M.M Shongwe

I received the manuscript in MS-Word format from the supervisor, and performed all the language
and style editing required. The edited dissertation was returned to the candidate edited in Microsoft
Word, and accompanied by a pdf file showing all editing affected.

Ian Raper

D Litt et Phil (RAU/UJ), MA (WITS), THED (JCE)
National President, Southern Africa Association for the Advancement of Science
(S2A3, est.1902)