

# **Library anxiety and the academic library: an investigation into student library experiences at the University of Cape Town**

*A minor dissertation submitted in partial fulfilment of the requirements for the award of the degree of Master of Library and Information Studies*

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## **COMPULSORY DECLARATION**

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## **DEDICATION**

To Dad

Without your continuing encouragement and support I would not be where I am today

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## ABSTRACT

Research across Asia and the United States has investigated library anxiety among undergraduate students from tertiary institutions; however, a gap exists in research conducted in Southern Africa. The purpose of this study was to investigate undergraduate student experiences at the University of Cape Town and to determine whether library anxiety exists among undergraduate students. The following critical questions were generated to address the problem: How do undergraduate students experience the academic library? Does the phenomenon of library anxiety exist among undergraduate students at the University of Cape Town? If so, in what ways does library anxiety manifest? The theory underpinning this research is Library Anxiety Theory. Library anxiety is a phenomenon used to describe the development of feelings of fear, uncertainty, or confusion, by undergraduate students when using an academic library. These feelings can be associated with aspects of the library experience: library staff, library environment, library resources and services, library policies, ICTS, and information literacy.

A mixed method approach was used incorporating quantitative and qualitative methodology to achieve a broader understanding of the phenomenon. Quantitative data was collected using the Library Anxiety Questionnaire and qualitative methodology was collected by interviews with four undergraduate students and five academic librarians. Descriptive analysis of quantitative data and thematic analysis of qualitative data were used.

The results of the study revealed that library anxiety exists at UCT amongst undergraduate students. Students have varied experiences of the academic library both positive and negative. Negative experiences could lead undergraduate students to develop library anxiety. The results of the study revealed further areas of research which could be beneficial to academic libraries in South Africa.

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## CHAPTER 1 - INTRODUCTION

### 1.1 Background:

Since 1994, students enrolling in higher education institutions come from diverse socio-economic backgrounds with different levels of literacy and different backgrounds of familiarity with ICTs (Naidoo & Raju, 2012:35; Johnson, 2016:118). Past research has identified a dramatic change in the education system and academic institutions due to the revolution of ICTs (Jain, 2013:133; Kumbhar, 2014:477 & Orús et al., 2020:1). Information and Communication Technologies (ICTs) can be defined as “a diverse set of technological tools and resources used to communicate and to create, disseminate, store and manage information” (Toro & Joshi, 2012:20). The emergence of educational technologies such as the Internet, web technology and software developments have led to a change in higher education. ICTs have had an impact on academic activities such as teaching and learning (Walmiki & Ramakrishnegowda, 2009:236; Kumbhar, 2014:477 & Orús et al., 2020:1). The change in teaching and learning is manifested in ‘educational technologies’ such as the Internet, software, hardware and wearable data capturing devices (Kumbhar, 2014:477).

Considering the changes in higher education due to the advancement of ICTs it is inevitable that academic libraries as an important part of higher education, change in response (Jain, 2013:133; Kumbhar, 2014:477 & Masenya, & Ngulube, 2019:1). How has the academic library had to change due to the development and emergence of ICTs? Library related processes have become computerised with rapid and easy access to information being facilitated by these technological developments. Methods of communication have changed as a result of technological development as well as tasks undertaken by modern libraries (Patel, 2012:3). Advances in ICT have led to vast improvements in the ability of libraries to access, store, and process information (Nazim, 2015:1 & Masenya, & Ngulube, 2019:1). The traditional model of librarianship - book-orientated librarianship, has adapted into librarianship concerned with the library user (Jain, 2013:133). Card catalogues were superseded by Online Public Access Catalogues (OPACs) providing library users easier access to a library’s collection as well as collections owned by many other libraries (Nazim, 2015:1). As a result of the development of ICTs the traditional academic library has been altered by new methods emerging in scholarly communication, the emergence of knowledge or

research commons, social media, and the dramatic growth of mobile devices (Raju, 2014:163).

The information needs of academic library patrons have been influenced by the constantly changing education system and ICTs. Library users have developed high expectations of library staff and those providing information. Library users expect to receive the right information, in the appropriate format, at the right time wherever they may be located (Barner, 2011:1; Jain, 2013:136 & Oliveira, 2018:60). Schöpfel et al. confirming this observation, noted that students have become accustomed to social networking, smart technology, and connectedness at anytime from anywhere (2015:67). Students have been able to access library resources such as books, databases and reference help from home, residences, or the classroom (2015:67).

Levine-Clarke argues that historically academic libraries have been the place to visit to find information (2014:425). Although students have been able to find information elsewhere at places such as public libraries or bookstores, students have become dependent on the academic library for their academic information needs. This dependence, however, has changed since the introduction of the Internet. An undergraduate student can now access free information online (2014:430). With the introduction of the World Wide Web in the 1990s, and the ability to access library resources remotely from home or work, university students and staff began to question why libraries are needed (Oliveira, 2018:60). Schöpfel et al. have posed a question regarding the value of the academic library: "Why should students enter a library building? What does the academic library offer them so that they come over to it?" (2015:67).

Despite the change in patron dependence on the library, Oliveira argued that scholars have always considered the academic library an important and essential aspect of the university learning experience (2018:63). Research in the last decades has shown that the academic library plays an indispensable and undisputable role in student higher education learning (Oliveira, 2018:63). Barner (2011) highlights the value of the academic library by noting that libraries and their staff can offer their specific expertise to their patrons. Academic libraries and their staff have information retrieval skills, and the ability to discern the quality of information and information and knowledge management (2011:1). The academic library holds further value as Barner has argued:

“The academic library can become a significant link in the chain of information, a link that is not only mediatory, but also directly assists in the creation and distribution of high quality, current and reliable academic information” (2011:6).

Kumbhar has asserted the value of the library in student learning arguing that students learn from the material and information services offered by the library (2015:480). Abusin and Zainab note that: “at some point of their university education, students will find it necessary to use the library to access and retrieve information for either research or learning needs” (2010:55). Patel compares the modern library to an information mall, navigation through which can cause difficulties (2012:3). One such difficulty, Patel argues, is the phenomenon of ‘library anxiety’, as commonly observed in higher education institutions (2012:3).

The literature also suggests that students might experience difficulties in academic libraries due to inequalities in primary and secondary schooling. Nel, Troskie-de Bruin & Bitzer have argued that the schooling system in South Africa is producing students who will not easily succeed in higher education (2009:971). Naidoo & Raju point out that the inadequate provision of resources at secondary schools in South Africa has resulted in students being under prepared for higher education institutions (Naidoo & Raju, 2012:42).

School libraries play an important role in teaching and learning of any school and should be a place where literacy, self-education and especially lifelong learning is instilled and developed (Shonhe & Marambe, 2019:2). This however is not the reality in many schools in South Africa. Racial segregation during the apartheid era had an unmitigated negative effect on the provision of services and resources to South Africans (Mhlongo & Ngulube, 2020:271). Resources and services were allocated unevenly according to racially segregating policies (Mhlongo & Ngulube, 2020:271). These policies which determined the uneven allocation of educational resources to communities of different races have had a lasting effect on South African schools (Mojapelo, 2014:3).

In his doctoral dissertation, Mojapelo investigated the provision of school libraries in both rural and urban areas in the Limpopo Province. In total 306 public high schools were included in the investigation (2014:128). He found that only 6% of schools had library collections or sets of books in classrooms and collections were sparse or

outdated. Furthermore, library materials were not systematically organised or well managed making these materials inaccessible to students (2014: 241-242). A lack of funding and qualified staff were identified as hindrances to the successful functioning of school libraries (2014:243).

Research in 2019 further investigated the conditions of South African schools (Nuku, 2019). Primary school libraries in the education district of Motheo in the Free State provided a case study of primary school libraries in South Africa (Nuku, 2019). Of twelve primary school libraries included in the research, only five had a library while the remaining schools had either informal library structures or in the case of a school in Botshabelo, a trolley on wheels used to hold library books which could be moved between classrooms (Nuku, 2019:94-95). Although five schools, located in urban areas had spacious libraries, 80% of the books were outdated Afrikaans books and there was reduced space for non-fiction, fiction, or reference materials in other languages. Nuku observed that these libraries did not have adequate relevant material to support the school curriculum (2019:101-12). Schools in the suburbs of Botshabelo, Dewetsdorp and Wepener had collections which were not processed and improperly shelved, making the use of these materials very difficult (2019:105).

## **1.2 The Research Problem:**

In the past ten years the theory of library anxiety has been widely researched particularly in North America and Asia. In her doctoral dissertation Bowers investigated library anxiety among law students at an unnamed law school in the United States (2010:40). In his doctoral thesis Birch investigated whether library anxiety of graduate students could be linked to a lack of information literacy instruction (2012:44). The investigation took place at an unnamed higher education institution in the Midwest in the United States (2012:45). Similarly, Platt and Platt investigated the effects of information literacy training on library anxiety of undergraduate students from an unnamed university in the South-Eastern United States (2013:240-242).

At an unnamed Malaysian higher education institution, library anxiety was investigated, using a 'library anxiety scale' which was distributed to over 8000 undergraduate students (Karim & Ansari, 2011:145). The following year in Malaysia a study was conducted at the Universiti Teknologi MARA which investigated library

anxiety (Husaini et al., 2012). In Pakistan, a study was conducted with undergraduate students from the Faculty of Social Sciences located at the University of Peshawar (Jan, Anwar & Warraich, 2016:56). The aim of the study was to investigate the library anxiety and emotional perception of students, focussing on the relationship between the two terms (Jan, Anwar & Warraich, 2016:52).

Although library anxiety has been studied elsewhere in the world, little research has been conducted in the African context. Library anxiety was however investigated in Sudan at the Sudan University of Science and Technology (Abusin & Zainab, 2010:58). The study aimed to determine whether library anxiety and library avoidance behaviour exist amongst university students and to examine the experiences, emotions and behaviour attributed to library anxiety (Abusin & Zainab, 2010:58).

A review of the literature revealed that no study has been conducted in South Africa on library anxiety in an academic library. This opens a research gap particularly given the widespread phenomenon of the under-preparedness of South African undergraduate students for university study.

### **1.3 Purpose and significance of the research:**

This research was interested in how undergraduate students experience the academic library in the context of rapidly evolving ICTs and widespread lack of exposure to ICTs and library experience of undergraduate students (Naidoo & Raju, 2012:35 & Jain, 2013:133). The research set out to assess whether the theory of library anxiety can be used to describe the experiences of undergraduate students and to determine therefore whether 'library anxiety' exists at UCT and how it manifests. To complement the study involving students and their experience of the library and whether and how library anxiety is part of this experience, an alternative perspective was incorporated, viz. a sample of UCT academic librarians to learn of their interactions with and observations of undergraduate students.

This research was motivated by the researcher's experience working as a student assistant at the UCT Hiddingh Hall Library and as a senior student assistant at the UCT Chancellor Oppenheimer Library (COL) from 2017 to the end of 2018. An interest in the interactions between librarians, assistants and students emerged from the researcher's first-hand experiences with students. As a student assistant, the

researcher was positioned at the front desk, assisting students with all manner of queries. Informally these interactions with students indicated that there were many students who manifested aspects of library anxiety.

This research could be of benefit both to libraries and students in the following ways:

1. Investigating the contributing factors to library anxiety at UCT could highlight factors under control of academic libraries that are contributory causes.
2. Students' perceptions of library staff can reveal areas of strength and weakness in the delivery of services in libraries.
3. Acknowledging contributing factors to library anxiety at UCT could lead to academic libraries examining the role of their interactions with students in the phenomenon.
4. Improved library services, based on these lessons, could mean that measures can be put in place to mitigate barriers to effective and efficient library use.
5. Students' research and assignment outputs could as a result be improved.

#### **1.4 Library Anxiety Theory:**

The theory underpinning this research is the theory of library anxiety as an explanation for the phenomenon of students experiencing anxiety when using the academic library. Constance Mellon coined the term 'library anxiety' in the process of investigating the findings of a six thousand participant study (Mellon, 1986:160). Students were asked to write an essay answering questions such as: What were your experiences using the library for your research paper? And how did you feel about the library and your ability to use it? Of the responses, 75-85% were that of fear and anxiety with feelings of fear, feeling lost or scared being unanimous (1986:278).

In their investigation of students at the Sudan University of Science and Technology from the Department of Management Information Systems, Faculty of Business Studies, and the Department of Library and Information Science, Abusin and Zainab attributed library anxiety to five factors:

1. Negative perceptions of the library environment
2. Negative perceptions of academic peers
3. Negative perceptions of library staff
4. Negative perceptions of services provided by the library.
5. Psychological barriers (2010:61)

These factors attributed to over 88% of participants experiencing library anxiety and 45% of participating students' avoidance of the academic library (Abusin & Zainab, 2010:73-75). According to Jan, Anwar & Warraich (2016), studies conducted in the 1970s and 80s investigated the reasons why students were not using their learning institution's library. The studies found that feelings of dissatisfaction of past services, feelings of inadequacy of library skills or knowledge, fear of looking ignorant or stupid led to feelings of anxiety in the library context (2016:52-53).

### **1.5 Methodology:**

In this research investigation, informed by the theory which sets out factors associated with the phenomenon and enhanced by the librarians' perspectives, the following critical questions were identified:

1. How do undergraduate students experience the COL library?
2. Do current UCT undergraduate students experience library anxiety and how does it manifest?
3. What are UCT librarians' views on library anxiety in the UCT library?
4. What remedies could be used to mitigate the phenomenon of Library Anxiety?

The methodology was structured to answer the critical questions identified. Two samples were identified: undergraduate students from the Humanities, Science and Commerce Faculties and UCT academic librarians. The online questionnaire was distributed to the first sample, the undergraduate students chosen according to their willingness to participate. The questionnaire, the UCT Library Anxiety Questionnaire (see Appendix A) was adapted with permission from the AQAK Library Anxiety Scale (Anwar et al., 2011). Telephone interviews with undergraduate students and

academic librarians formed a second data collection method. Students who had completed the questionnaire and noted a willingness to be interviewed were interviewed in an in-depth telephone interview. While these interviews followed an unstructured path, they were guided by basic questions such as the following:

1. How often do you use the library?
2. What do you use the library for? (E.g., using computers, printing, borrowing materials, studying for examinations, doing assignments)
3. Can you describe a situation in which you experienced negative feelings when using the academic library?
4. Do you have any other comments on this topic?

Other questions, arising from the responses in the questionnaire, were asked to probe for more detail, clarification, or examples.

Academic librarians comprised the second sample. Librarians working in the three faculties identified were approached and chosen for their willingness to participate. Telephone interviews with the academic librarian sample formed a third data collection method. Telephone interviews with academic librarians followed a more structured path to answer a specific set of critical questions:

1. How often do you interact with undergraduate students?
2. For what purpose do students interact with you?
3. Can you describe an interaction with a student who had a negative experience when using the library? This can be a first-hand observation, or a report from a third party.
4. Had you heard of the term 'library anxiety' prior to this interview?
5. What remedies can you suggest to mitigate the phenomenon of library anxiety?
6. Would you like to make any other comment?

## **1.6 Limitations and Delimitations:**

Limitations of a study can be defined as weaknesses that are out of the control of the researcher (Theofanidis & Fountouki, 2019:156). The authors argue:

“In this respect, a limitation is an ‘imposed’ restriction which is therefore essentially out of the researcher’s control. Still, it may affect the study design, results and ultimately, conclusions and should therefore be acknowledged clearly in the paper when submitted” (Theofanidis & Fountouki, 2019:156).

Delimitations are consciously set limitations by the researcher in the form of boundaries to ensure that the research aims, and objectives of a study do not become impossible to achieve (Theofanidis & Fountouki, 2019:157).

### **1.6.1 Limitations:**

This research was limited by the coronavirus pandemic. The coronavirus pandemic caused the closure of UCT libraries and therefore responses to the questionnaire and in interviews were based on library experiences prior to 2020. Additionally, the closure of the library limited access to students and thus the number of participants of the questionnaire.

### **1.6.2 Delimitations:**

This research included the following delimitations:

1. The data collection was limited to an online survey because restrictions on movement on account of the coronavirus pandemic did not allow data collection in the library, as originally planned.
2. The sample was limited to undergraduate students from select faculties which does not include all UCT undergraduate students. This excludes the experiences of all undergraduate students from the study.

### **1.7 Report Structure:**

This dissertation consists of five chapters, a reference list, and appendices:

Chapter One, the Introduction, includes the background of the study, research problem and summaries of the theory and research methodology. Chapter Two, the literature review, investigates past research on the topics of the academic library as well as library anxiety. Chapter Three describes the research design and methodology for the study. Chapter Four presents the findings of the study and an evaluation of the findings. A final, short chapter, Chapter Five which discusses the main findings of the study, provides a conclusion and recommendations, concluding the report.

### **1.8 Conclusion:**

Chapter 1 provided a background to the study showing that library anxiety has been investigated across the world since the 1980s as a way in which to describe university students' negative experiences of the academic library. The aim of this research was to bridge an identified gap in library anxiety research and investigate library anxiety theory in the context of South Africa at the University of Cape Town. Chapter 2 presents a review of literature addressing the nature of libraries and academic libraries in South Africa, the theory of library anxiety and prior library anxiety research.

## CHAPTER 2 - LITERATURE REVIEW

### 2.1. Introduction:

According to Webster and Watson:

“A review of prior, relevant literature is an essential feature of any academic project. An effective review creates a firm foundation for advancing knowledge. It facilitates theory development, closes areas where a plethora of research exists, and uncovers areas where research is needed” (2002:13).

This literature review covers literature on the current nature of the academic library, and how changes in higher education and the emergence of new technologies have led to changes in academic libraries. Furthermore, literature on the value of school libraries in preparing students for higher education and the value of academic libraries is covered. The theory of library anxiety is introduced as an explanation for students' negative experiences of academic libraries.

### 2.2. Higher Education and the Academic Library:

Change is a constant phenomenon especially in the so-called ‘twin fields’ of higher education and libraries (Kumbhar, 2014:477). The emergence of educational technologies such as the Internet, web technology and software developments have led to a change in higher education. As libraries have been a vital part of higher education, they have inevitably had to change to respond to the changes in higher education (Kumbhar, 2014:477). Jain reiterates this change by noting the change in the education system and academic institutions due to the revolution of Information and Communications Technology (ICTs) in the 21st century (2013:133). In more recent research this significant change is further reiterated (Orús et al., 2020:1).

Literature about the nature of the academic library over the past few years has highlighted these changes in the academic library. The traditional academic library has been altered by the expansion of facilities such as knowledge or research commons, the growth of social media and mobile devices (Raju, 2014:63). Libraries in the 21st century no longer have traits in common with the traditional library model. Books are no longer the main element of the library instead electronic sources of information have become increasingly popular in libraries. Electronic documents,

databases, resources from the Web and e-books have become a dominant source of information for the library (Patel, 2012:3). Library related processes have become computerised and access to information across the world has been facilitated by technological development. Methods of communication have changed because of technological development as well as tasks undertaken by modern libraries (Patel, 2012:3).

Jain compares the traditional library to the academic library of the 21st century highlighting the specific changes in library services. The traditional academic library developed a collection including books and journals in physical print format; information was limited to the physical library and library services were available only during operating hours. Students developed a dependence on print resources, librarians mediated searches for information, information needs of library users were easily identifiable, and access to information was limited (2013:134).

In comparison the 21st century library can be characterised by:

1. A collection determined by the needs and demands of library users.
2. Information becoming available from different sources such as online databases, electronic journals, and open access information.
3. A greater quantity of information available in multiple forms.
4. High dependence on digital resources, many services becoming available 24/7, diverse information needs and user searches becoming web based (Jain, 2013:134).

### **2.3. ICTS and the role of the academic library:**

American authors Matacio and Robertson argue that even before students arrive at a higher education institution a student needs to be proficient in communicating online. Assignments, interactions with teachers and even library services can take place online (2011:23). They claim that most students enrolling in institutions in the USA were adept at using the Internet or information technologies, noting, however, that this might not be the case in countries in the global South where online experience differs (2011:23-24).

In South Africa, since 1994, students enrolling in higher education institutions come from diverse socio-economic backgrounds with different levels of literacy and different backgrounds of familiarity with ICTs (Naidoo & Raju, 2012:35). Oyedemi and Mogano divided young South Africans into two categories they called 'digitally privileged' and 'digitally disadvantaged' (2017:2-3). 'Digitally privileged' refers to persons who have so called 'digital wealth', this wealth refers to the multiple platforms providing access to the Internet at home, on mobile devices and at school. Students in this group have digital skills which allow them to use computers and the internet on multiple other devices (Oyedemi & Mogano, 2017:3). In comparison 'digitally disadvantaged' persons lack the digital skills needed to use the Internet or digital technologies for social or academic purposes. This lack of skill is attributed to a lack of access to digital technologies at home or at school (Oyedemi & Mogano, 2017:3). The 'digitally disadvantaged' are often exposed to digital technologies for the first time upon entering university (Oyedemi & Mogano, 2017:3).

Academic libraries play an important role "to support the three main institutional activities teaching, learning and research of their academic community staff, students and researchers" (Jain, 2013:133). These roles have changed as learning has changed dramatically in the 21st century. Methods of learning have become collaborative, hybrid and online based (Kumbhar, 2014:479). As methods of learning have become online based, academic libraries have had to adapt to this by providing services that will support online learning, teaching, and research (Jain, 2013:136).

The needs of library users have also changed, library users have developed high expectations of library staff and those providing information. Library users now expect to receive the right information, in the appropriate format, at the right time from wherever they may be located (Jain, 2013:136). Students have become accustomed to social networking, smart technology, and connectedness at anytime from anywhere. Students have been able to access library resources such as books, databases and reference help from home, residences, or the classroom. (Schöpfel et al., 2015:67).

Libraries use different types of ICTs for services offered by the library. Krubu and Osawara summarise their many uses in the academic library thus: ICTs have affected the way in which information is managed within libraries with computing, communication and storage technologies changing the way in which information is accessed, retrieved, stored, and distributed (2010:3). Academic libraries have been

using ICTs to assist in the core functions of their libraries as well as assisting in resource sharing, developing institutional repositories and digital libraries. ICTs have transformed the academic library and its services by facilitating effective, efficient, and cost-effective delivery of services and dissemination of information (Krubu & Osawaru, 2010:4). Academic libraries have been changing through the adoption of new technology evident in the introduction of computerised library catalogues, 24/7 access and electronic databases and journals (Kumar, 2009:105).

Library users' information needs have been influenced by the changing education system and development of ICTs. Library users have developed high expectations of librarians to access information in the right format, at the right time and from wherever they may be located (Jain, 2013:136). The emergence of the Internet has afforded libraries the ability to provide resources to patrons who never visit a physical library and instead use resources from home or work (Kumar, 2009:105).

#### **2.4. School Libraries:**

Students' unpreparedness for higher education can be attributed to the lack of library habits due to the poor provision of school libraries and resources. School libraries are an important source of information materials that support learners in school assignments and homework (Mojapelo & Dube, 2014:8). Furthermore literacy, lifelong learning, and self-education are developed in schools through the school library (Shonhe & Marambe, 2019:2). The unfortunate reality in south Africa is that school libraries are often under resourced and cannot efficiently carry out their roles.

Racial segregation during the apartheid era was evident in the unequal allocation of resources and services to South Africans (Mhlongo & Ngulube, 2020:271). In 2014 it was found by Mojapelo that most schools, specifically schools in disadvantaged communities and in townships or informal settlements, still displayed the unequal allocation of resources due to the apartheid. These schools were not well-stocked or well-staffed (Mojapelo, 2014:3). The results of an investigation of public high schools in the Limpopo Province of South Africa found that disadvantaged and marginalised rural communities lacked access to library resources and information necessary for the school curriculum. A very small number of schools had the resources and staff

needed for a school library, however the remainder of schools had non-functioning libraries (Mojapelo & Dube, 2014:14).

In 2019 research done in the Free State Province of South Africa showed that the inadequate provision of resources, as discovered in public high schools, begins at the primary school level. In this study, 12 primary school libraries in the Motheo District in the Free state were investigated and the findings provided a case study for primary schools in South Africa (Nuku, 2019:94) The findings showed that school libraries often lacked a solid library structure and instead had very informal library structures. One library had moveable trolleys on which library books were held and distributed from class to class and in another the 'library' was instead a shelf or cupboard within the classroom (Nuku, 2019:95-96). Five of the 12 primary schools had solid library structures; however, these libraries were not considered well-functioning due to specific factors. Most books in these libraries were outdated Afrikaans books limiting space available for books in other languages and genres. These library collections contained very few non-fiction learning materials which are considered important for learning. The schools investigated did not have enough materials relevant to the school curriculum (Nuku, 2019:101-102). Furthermore, in schools in the areas of Botshabelo, Wepener and Dewetsdorp, not all library books were processed or correctly shelved (Nuku, 2019:105).

Nel et al. suggested a link between school libraries and the preparedness of students for university, observing that the South Africa schooling system is producing students who will not easily succeed in higher education (Nel et al., 2009:971). Literature has argued that inadequately resourced South African high schools have resulted in under-prepared students enrolling at tertiary education institutions (Naidoo & Raju, 2012:42).

One factor of unpreparedness is that of poor ICT skills of university students. While there are students who have had extensive experience with and have gained good ICT skills, in contrast, many students have had no interactions with ICTs and thus lack ICT skills (Naidoo & Raju, 2012:34). Most university students are in the latter category and are likely to have their first interaction with ICTs when they arrive at university. These students can as a result struggle with what are considered basic computer skills (Naidoo & Raju, 2012:34). Computers play an important part in education and as computer technology changes, students must adapt to and learn how to use computer applications. It has become imperative that students at a university level are computer

literate as computer skills are necessary to perform academic tasks (Schlebusch, 2018:73). The reality in South Africa is that students from rural and disadvantaged areas often have had no exposure to computers and the Internet or have not developed sufficient skills to use ICTs (Schlebusch, 2018:73).

## **2.5. Theoretical Framework:**

Imenda (2014:189) describes a theoretical framework as “the application of a theory, or a set of concepts drawn from one and the same theory, to offer an explanation of an event, or shed some light on a particular phenomenon or research problem”. The theory underpinning this research is the theory of library anxiety as an explanation for the phenomenon of students experiencing anxiety when using the academic library.

The theory of library anxiety emerged from research conducted by Constance Mellon at an unnamed university in the south of the United States with six thousand students doing research in the academic library for the first time (Mellon, 1986:276). Students were instructed to keep search journals within which they noted their experiences conducting research and complete an essay within which they address the following: their experiences using the library to find information for their first research paper, how they felt about the library and their ability to use it, whether their feelings had changed over the semester and how they currently felt about the library (Mellon, 1986:278). The results of the journals and essays found that 75% - 85% of students in each participating class described their initial response to the library using the words ‘fear’ and ‘anxiety’. Included in the descriptive words used by students were words such as ‘lost’, ‘overpowering’, ‘helpless’ and some students even described their feelings as a phobia (Mellon, 1986:278). Negative experiences were associated with the large size of the library, confusion about the location of books or other information materials, confusion as to how to start the research process and a lack of understanding of how to use the library (Mellon, 1986:278-279).

Mellon developed the theory of library anxiety from the results of the large study, noting:

“Descriptions such as these led to the formulation of a grounded theory that when confronted with the need to gather information in the library for their first research paper many students become so anxious that they are unable to approach the problem logically or effectively” (1986:163).

Initial research which led to the development of the theory of library anxiety found that most students' first response to the academic library was one of fear or anxiety. One participant explicitly expressed this fear "When I first entered the library, I was terrified" (Mellon, 1986:162). Many students expressed feeling lost in the library as a result of several factors, namely the large size of the library, their lack of knowledge of the library layout and how to begin and conduct research or information searches (Mellon 1986:162). Mellon argued that these fears and feelings could result in students developing anxiety. It was concluded that the majority of students experienced fear when using the academic library which could be called library anxiety (Mellon, 1986:163).

## **2.6 Development of Library Anxiety Research:**

An initial fear of entering the library as described by Mellon emerged in later research by Abusin and Zainab with Sudanese students. One student described their first time using the library and being 'seized by fear'. This fear was found to exist extensively in 45 out of 51 students in the study (Abusin & Zainab 2010:73). In the Sudanese context, contributing factors to library anxiety were numerous, with some factors such as people of different sexes using the library being context specific (Abusin & Zainab 2010:73). Contributing factors to library anxiety were the negative perceptions towards several factors such as the library environment, peers, library staff, library services: and the factor of psychological barriers (Abusin & Zainab, 2010:61). Psychological barriers included frustration and confusion provoked by information searches and having to write research papers and interestingly low self-esteem in the form of self-doubt (Abusin & Zainab 2010:72-73). It was concluded that the majority of Sudanese students in the study experienced library anxiety in association with multiple factors (Abusin & Zainab, 2010:72-73).

The initial fear of entering an academic library which was discovered in research in 1986 and 2010 (Mellon; Abusin & Zainab) emerged in 2015 in research done by among students in the West Indies (McPherson, 2015). Most students experienced negative emotions in their first encounter with the university library (McPherson, 2015:322). Several contributing factors to anxiety identified in Abusin & Zainab (2010) were found in this later research: Institutional factors of library resources and staff and personal factors such as lack of confidence and confusion about conducting

information searches (McPherson, 2015:320). It was concluded that library anxiety is experienced among students from the West Indies (McPherson, 2015:323). This anxiety was experienced to a lesser degree than observed in the earlier library anxiety research of Mellon (1986) and Abusin & Zainab (2010)

In Southern Asia, Jan, Anwar and Warraich (2016) conducted a study to investigate the level of library anxiety among undergraduate social science students. Questionnaires were distributed to roughly 345 final year social sciences students at the University of Peshawar in Pakistan (2016:56-57). The results of the study found that students' anxiety was largely due to their lack of knowledge on how to use resources, how to search for the required material and their lack of understanding of library policies (2016:58). In comparison to previous studies by other authors, students at the University of Peshawar did not attribute much of their anxiety to the library space or their interactions with librarians (2016:58).

A study conducted at the Sudan University of Science and Technology investigated whether library anxiety or library avoidance existed amongst undergraduate students (Abusin & Zainab, 2010:61). To gather data about the feelings and experiences of students, in the students' own words, a diary method was used. (Abusin & Zainab, 2010:59). Students were expected to keep diaries whilst writing a research paper. The diary served as a method in which to document how the students felt using the library to complete their research paper (2010:59). The diaries of 51 students were analysed and the data divided into five themes: "a) Negative perceptions towards library environment, b) Negative perception towards peers, c) Negative perception towards library staff; d) Negative perception towards library services; and e) Psychological barriers" (Abusin & Zainab, 2010:61).

In their study they found that negative perceptions of the library could be attributed to the library layout, arrangement and cleanliness of the library, library regulations, disturbances caused by noise, seating in the library, the small size of the library building and the lack of available space in the library (Abusin & Zainab, 2010:61-65). The layout of the library, the cleanliness and arrangement of the library were directly linked to a student's negative perception of the library. Student responses suggested that the library lacked a good arrangement and cleanliness, factors which could lead to students avoiding the library (Abusin & Zainab, 2010:62). Student used words such as 'unappealing', 'depressing' and 'discouraging' to describe their reactions to the

library. Responses suggested that for a student to be able to relax in the library environment, the library should be tidy and well organised (Abusin & Zainab, 2010:62). Furthermore, student responses suggested that should the library maintain order, students could use the library more efficiently and the search for information would become easier (Abusin & Zainab, 2010:62).

Library regulations influenced the perceptions of roughly 33.3 % of the participants (Abusin & Zainab, 2010:63). Student responses included complaints about the length of library operating hours with many students expressing the desire for the library to extend their closing time (Abusin & Zainab, 2010:63). Further complaints included loan limits and reference material loan rules (Abusin & Zainab, 2010:63). The library regulations could lead to the library being unattractive to students as one student noted (2010:63). Over 60% of participants complained about disturbances caused by noise such as library furniture and equipment being moved, conversations between students or students using their mobile devices (Abusin & Zainab, 2010:64). The noise disturbances could affect the concentration of students (Abusin & Zainab, 2010:64).

The library size, space and seating were among common complaints made by students. A lack of seats in the library was noted as a barrier to students who wished to study or complete work (Abusin & Zainab, 2010:65). The seating was deemed uncomfortable and not conducive to sitting for long periods of time (2010:65). The library as a building was deemed to have insufficient space. This was evident in students noting crowding during peak hours, narrow spacing between bookshelves and the cramped spacing of seats (Abusin & Zainab, 2010:65-66). The small library space was given as the reason for tasks not being completed efficiently, students being conscious of noise and feeling stifled (Abusin & Zainab, 2010:66).

Over 60% of students noted that their peers contributed to disturbance in the library through activities such as sleeping in the library, talking, and using their cell phones. Disturbances by peers resulted in reduced concentration levels and library avoidance (Abusin & Zainab, 2010:66). Respondents complained about their peers mishandling and purposely mis-shelving books, actions which caused concern and frustration (Abusin & Zainab, 2010:67).

Negative perceptions towards library staff were related to their opinions that staff were indifferent, irritable, and unhelpful. Staff were described as impolite and were criticised

for speaking to students in a rough, curt, or demeaning manner (Abusin & Zainab, 2010:67). The interactions with staff members led to feelings of confusion, frustration, stress, and anxiety (Abusin & Zainab, 2010:67). Over 25 % of students described library staff as irritable and expressed the desire that library staff would be more patient with and establish better relationships with students (Abusin & Zainab, 2010:67). Library staff were further described as being unhelpful or reluctant to assist students. Responses indicated that students found assistance from staff lacking when searching for books in the library which led to frustration and a waste of time (Abusin & Zainab, 2010:68).

Library staff were perceived as not fulfilling their role by not maintaining order in the library, not re-shelving books and not displaying professionalism (Abusin & Zainab, 2010:68-69). Responses described library staff as lenient towards or ignoring students talking in the library and engaging in unprofessional behaviour such as talking and arguing amongst themselves contributing to disorder in the library (Abusin & Zainab, 2010:68). Lastly students described library staff as ignorant of the subjects of some books and their location within the library. This ignorance was noted as a contributing factor to students' avoiding asking librarians for help (Abusin & Zainab, 2010:69).

Students expressed negative perceptions towards services offered by the library including an inadequate number of books and references, a lack of relevant or current materials and an inadequate loan system (Abusin & Zainab, 2010:70). Over 70% of students noted that the library did not provide enough books and reference materials to students. Included in this complaint, some students noted an inadequate number of copies of popular or coursework-relevant books (Abusin & Zainab, 2010:70). The relevance of materials provided by the library was noted as unsatisfactory. Students described feeling distressed and disappointed when finding outdated information in books, leading to their negative view of the library as unhelpful (Abusin & Zainab, 2010:70-71). Loan services were deemed unsatisfactory as loan rules restricted students' use of the library thus creating difficulties for them (Abusin & Zainab, 2010:71).

Over 75% of participants noted feelings of stress or anxiety when searching for books and references in the library. This psychological phenomenon served as a barrier to students using the library (Abusin & Zainab, 2010:71). In the process of searching for

information due to the lack of a library catalogue, receiving no help from library staff, not knowing the title of a book and the length of the search process, students would become upset (Abusin & Zainab, 2010:71). Misplaced or hidden books led students to become angry and stressed as the search process would become difficult or impossible (Abusin & Zainab, 2010:71).

Onwuegbuzie conducted an 81-person study with graduate students at an unnamed large university in the Mid-Southern United States (1997). The students in the study experienced anxiety provoked by their fear of asking librarians for assistance (1997:15). Students perceived themselves to be incompetent in using the library and rated their library skills as poor (1997:16). Many students did not feel safe and felt uncomfortable in the library and this created a sense of anxiety (1997:16). Location anxiety was another form of anxiety experienced by students whereby they felt unfamiliar with the library space and could not locate the materials they needed (1997:16). Lastly some students suffered what Onwuegbuzie calls 'mechanical anxiety', created by their lack of familiarity with equipment in the library such as computers or photocopiers (1997:17).

McPherson investigated library anxiety amongst 150 undergraduate students within the faculty of Humanities and Education at the University of the West Indies (2015:317). The study employed a questionnaire to ask questions relating to library anxiety, including their use of the library (2015:319). The results of the study found that 50% of students experienced feelings of anxiety, as evidenced in their description of feelings of confusion, uncertainty, and anxiety (2015:319). The study found that personal feelings in combination with institutional factors contributed to library anxiety (2015:320). Personal feelings arose from uncertainty related to both the general library space and uncertainty about how to use the library space (2015:320). McPherson found that institutional factors associated with anxiety, were occasioned by the availability of computer and photocopying services (2015:321). The overall results of the study indicated that personal feelings contributed to anxiety more often than institutional factors (2015:322).

### **2.6.1 The effects of library anxiety:**

The implication of library anxiety is that students' ability to use the library for their information needs is adversely affected. Mellon argued that students can become so anxious when the need to gather information arises that they cannot approach the task logically or effectively (1986:163). A further effect of library anxiety is avoidance behaviour. Abusin, Zainab & Karim found that nearly half of the student participants in their research, exhibited library avoidance behaviours (2011:172). Students described completing tasks quickly, photocopying books to avoid reading in the library and leaving the library without completing the tasks they had set out to perform. Students avoided the library, went to the library with friends or left the library quickly to avoid feelings of anxiety (Abusin, Zainab & Karim, 2011:172).

Abusin and Zainab noted that 45% of participants in their study exhibited library avoidance behaviour or attitudes (2010:75). Feelings of unease and discomfort experienced in the library increased the students' desire to exit the library as quickly as possible. Students' leaving the library before finishing a task and leaving the library as soon as they had entered were common behaviours (2010:75). Other avoidance behaviours noted were students leaving the library to use alternate Internet sources such as Internet cafés, borrowing or photocopying books to avoid having to read within the library and avoiding asking librarians for assistance (Abusin & Zainab, 2010:75).

Carlile address further effects of library anxiety, linking the phenomenon to what she calls "counter-productive behaviours". These behaviours could include library avoidance, reluctance to seek help from librarians, avoiding searching for information, a lack of focus in resource searching and an inability to approach library tasks logically or effectively (2007:136). There is consensus in the literature that library anxiety is a barrier to efficient and effective library use (Carlile, 2007:136).

### **2.6.2 Finding a solution to library anxiety:**

Carlile (2007), in a summary of research studies, suggests that the acknowledgement of library anxiety by librarians, programmes of library instruction, interactions with librarians, and improved attitudes or behaviours of librarians, would all mitigate the effects of library anxiety. In summary, a user-friendly library could contribute to students' positive library experiences thus reducing library anxiety.

Acknowledging library anxiety and making library-anxious students aware of peers who may share similar fears could reduce anxiety. Library instruction programmes including computer tutorials, assisting in the understanding the process of finding information and information literacy instruction could reduce library anxiety (Carlile, 2007:136-137). Confidence and comfort levels may increase with the understanding that there are individuals in the library who can assist students. Opportunities for students to initiate and develop relationships with librarians are important for future interactions (Carlile, 2007:137). Research has shown that if librarians embody characteristics such as being visible, approachable, unthreatening, professional and sensitive to students who feel fearful or concerned, students feel comfortable in their presence and able to seek help when feeling lost or anxious (Carlile, 2007:138).

Making the library user-friendly can be achieved through making the library more visually understandable and accessible with understandable signage, directions, and instructions. Well maintained library equipment and designated talking and silent areas could potentially add to the user-friendly nature of the library (Carlile, 2007:138). If the library provides students with a positive experience, during which students experience approachable and accessible staff in a non-threatening environment, they are likely to feel more confident and comfortable using the library. This positive experience could encourage students to visit the library more frequently and to consult reference librarians for assistance when it is needed (Carlile, 2007:138-139).

In her study McPherson at the University of the West Indies found that the most prevalent problem encountered by students was their inability to locate resources in the library. She suggested that a user-friendly directory explaining the layout of the library and what resources can be found on specific floors of the library, could reduce library anxiety (2015:323). Library anxiety was seen to be triggered by confusion and frustration due to a lack of clear and proper signage. Proper signage, labelled shelving and properly labelled special collections could allow students to access resources easily and quickly (McPherson, 2015:323)

McPherson (2015) recommended strategies to reduce and prevent library anxiety. McPherson (2015) reported that at the University of West Indies a lack of students' information literacy skills was shown to contribute to library anxiety, therefore a strategy to improve these skills would be necessary. She recommended that the

library market their information literacy and orientation programme and even make the programme mandatory (McPherson, 2015:323).

In order to ensure students' familiarity with the library and necessary skills to use the library, McPherson suggests that existing training sessions and tours be adjusted to deal with the phenomenon. The library could extend these sessions to take place throughout the semesters and offer frequent days and times for students to attend the sessions. These adjustments could ensure that a greater number of students attend these important sessions (2015:323). To reach as many students as possible, McPherson suggests that the library should collaborate with the managers of the student residences to incorporate library orientation and training sessions into regular orientation programmes (2015:323).

Although staff behaviour and attitudes did not contribute significantly to library anxiety in her study, McPherson suggests that staff should undertake customer service training to encourage them to be accommodating, friendly and helpful to students. Staff should be easily accessible to students at a help desk at the main entrance to the library and on different floors of the library to assist students (2015:323).

## **2.7 Conclusion:**

The literature review revealed a number of trends in research into library anxiety.: Students from the United States (Mellon, 1986), the Sudan (Abusin & Zainab, 2010) and the West Indies (McPherson, 2015) experienced library anxiety, manifested in an initial feeling of fear when using their institutions academic library, reinforcing findings from earlier research. The literature found that library anxiety could have adverse effects on students such as difficulty in completing tasks and searching for information (Mellon,1986:143) and library avoidance (Abusin, Zainab & Karim, 2011:172).

Chapter 2 presented a review of literature addressing the nature of academic libraries, library anxiety theory and library anxiety research across the world. Chapter 3 presents the research approach, design, and methodology of this study.

## CHAPTER 3 - RESEARCH DESIGN AND METHODOLOGY

### 3.1 Introduction:

The aim of this research was to investigate the phenomenon of library anxiety as experienced by a sample of undergraduate students at the University of Cape Town. In 1986 Constance Mellon developed the theory of library anxiety. In a study conducted with university students, Mellon reported that 75-85% of student participants described their first response to the academic library using terms such as fear and anxiety (1986:278). Experiences described by participants led to the construction of a theory that states that when students are confronted with an information need and are required to visit the library, they can become so anxious that they cannot approach the problem in a logical or efficient way (Mellon, 1986:279). Mellon called this fear of the academic library 'library anxiety' (1986:280).

In further research on library anxiety, researchers (McPherson, 2015, Abusin & Zainab, 2010 & Shoham & Mizrachi, 2001.) used various methods to identify incidents of library anxiety and investigate the phenomenon further. These methods of data collection include collecting data using a survey to identify incidents of library anxiety (Shoham & Mizrachi, 2001 & McPherson, 2015) and diaries to investigate the manifestation of library anxiety (Abusin & Zainab, 2010).

A few decades after Mellon's original research (1986), the interest in the phenomenon has not abated. Patel (2012) argues that modern libraries can be compared to information malls and that moving through these malls can cause difficulties. One such difficulty is the phenomenon of library anxiety; a phenomenon where library users experience feelings of discomfort about their perceived level of knowledge or fear of asking questions for fear that they embarrass themselves. These feelings of fear or discomfort could be caused by library users perceiving the library as an 'unfriendly' place (2012:3).

Drawing on the theory and methodological approaches cited above (and elsewhere) this research project used a combination of qualitative and quantitative approaches to gain the broadest understanding of the experiences of a sample of University of Cape Town undergraduate students when using the academic library. The research aimed to address the following research questions:

1. How do undergraduate students experience the COL library?
2. Do Current UCT undergraduate students experience library anxiety and how does it manifest?
3. What are UCT librarians' views on library anxiety in the UCT library?
4. What remedies could be used to mitigate the phenomenon of Library Anxiety?

### **3.2 Research Approach:**

A research approach can be defined as the plans and procedures involved in research which include methods for data collection as well as the analysis and interpretation of data (Creswell & Creswell, 2018:3). A mixed methods research approach was chosen for this study. Mixed method research can be defined as the combination of elements from quantitative and qualitative research.

The study used a combination of quantitative and qualitative approaches which allowed the collection of quantitative and qualitative data, Punch defines quantitative data as information about the world in a numerical form and qualitative data as information about the world in the form of words (2014:87). He explains that the term 'quantitative research' should be viewed as more than an approach that uses numerical data and should rather be described as a way of thinking which involves several methods and data in a numerical form. Qualitative research, in his view, should be viewed as more than simply an approach which does not include numerical data; it too should be viewed as a way of thinking that involves many methods and data in non-numerical form (Punch, 2014:3). Creswell and Creswell define quantitative research as an approach within which objective theories are tested by examining the relationship between variables (2018:4). Variables are measured on instruments yielding numbered data to be analysed by statistical procedures. In contrast, they describe qualitative research as an approach that explores and seeks to understand the meaning individuals attribute to a problem (2018:4).

In an in-depth investigation of the strengths and limitations of methods of data collection in both quantitative and qualitative approaches, Queirós et al. (2017) identify the limitations of in-depth interviews and surveys, two methods used in this research. Limitations of in-depth interviews in the qualitative research approach were identified

as the time-intensive nature of the method as well as the inability to generalise findings (Queirós et al., 2017:378). In comparison, the limitations of the quantitative approach - in the form of a survey method - were identified as the rigid structure of surveys and the fact that the reliability of the survey is dependent on the structure of a survey and the quality of answers given (Queirós et al., 2017:382). Furthermore, an important limitation of surveys is that they do not record the behaviours, emotions, or changes in emotions of participants (Queirós et al., 2017:382). A combination of research approaches thus can provide a stronger understanding of the research problem and can mitigate the limitations of each approach:

“In a sense, more insight into a problem is to be gained from mixing or integration of the quantitative and qualitative data” (Creswell & Creswell, 2018:213).

### **3.3 Research Design:**

Punch defines research design as follows:

“At the most general level it means all the issues involved in planning and executing a research project-from identifying the problem through to reporting and publishing the results” (2014:114).

Creswell and Creswell define a research design as a type of investigation within a research approach that provides direction for procedures in a research project (2018:11). The study used a convergent mixed methods design. The convergent mixed methods design consists of collecting quantitative and qualitative data, doing separate data analysis for each method and the comparison of the data to discover if the data confirm or disconfirm results (Creswell & Creswell, 2018:217).

### **3.4 Research Site:**

Research was conducted at the University of Cape Town (UCT) with undergraduate students from the Humanities, Science and Commerce Faculties who use the Chancellor Oppenheimer Library. Seven subject librarians; three librarians from the Humanities Faculty, two from the Science Faculty and two from the Commerce Faculty, were approached via email to participate in an interview.

### **3.5 Data Collection Methods:**

It was decided that due to the 2020 Covid-19 pandemic restrictions, data collection be conducted online rather than in-person to ensure the safety of the researcher and participants. Data can take the form of information that is numeric, text or audio in nature (Creswell & Creswell, 2018:16).

A mixed methods combination of an online questionnaire survey followed by in-depth phone interviews was the appropriate choice for data collection for the first sample, the undergraduate students. This choice was informed by the theory of library anxiety which describes and accounts for the phenomenon arising from a study which documented the prevalence of the phenomenon, in an attempt to understand the experiences of undergraduate students using the academic library (Mellon, 1986).

#### **3.5.1 The Questionnaire:**

A questionnaire seeks information such as behavioural information and can include measures such attitudes, opinions, or beliefs (Punch, 2014:241). Rowley argues that creating a good questionnaire requires much effort and planning. A good questionnaire can be described as one that collects the necessary data to answer research questions and that attracts a good rate of response (2014:2). The questionnaire can be designed de novo, or it can be formulated by adapting an existing instrument. It was determined that the AQAK library anxiety scale questionnaire would be appropriate for the current research due to the tested validity and reliability of the scale, the potential benefits of using the scale, and the encouragement by the developers of the instrument of other researchers to use the scale in future research. Anwar et al (2011) undertook extensive research and testing before establishing their library anxiety scale. The authors described the construction of their scale:

“The study was conducted in three phases and the data analysed using a variety of statistical analyses. This process resulted in the final instrument of 40 statements which clustered into five factors. The resulting scale is a highly valid and reliable measure of library anxiety” (Anwar et al., 2011:44-45).

The AQAK scale has not only undergone extensive research and testing, but it has also been determined by Anwar et al. to be a reliable tool to measure library anxiety (Anwar et al., 2011:44-45). This investigation therefore adjusted the AQAK library

scale to suit the conditions of the research site and the specific sample. Permission was granted by the creators of the AQAK scale for the scale to be used in this research. The adjusted questionnaire, The Library Anxiety Questionnaire, is attached as Appendix A.

The authors state their intent for the AQAK scale:

“AQAK which was developed using undergraduate students of Kuwait University, a developing Arab nation, needs to be tested further using similar students from different universities and other national cultures. We encourage researchers interested in this area to conduct research using AQAK in their country” (Anwar et al., 2011:45).

The AQAK scale consists of forty statements grouped into five factors. These factors are Information Resources, Library Staff, User Knowledge Library Environment and User Education. Each statement addresses important factors identified by the authors of the scale as elements of library anxiety. The AQAK was adjusted using the Research Electronic Capture Software (REDCap) to suit the UCT library context. The number of statements was reduced to thirty-six statements and an option to provide an email address was added. This was added to identify participants willing to be interviewed about their experiences using the UCT library. Thus, in addition to establishing the existence and incidence of library anxiety among UCT undergraduate students, the study aimed to gain an understanding of how and in what circumstances the phenomenon was experienced by them.

The appropriate sampling method was determined to be volunteer sampling. Volunteer sampling can be defined as a convenience sampling whereby the decision to participate is solely made by the respondent (Vehovar et al., 2016:328).

The Humanities, Commerce and Science faculties were chosen as students from these faculties frequent the COL. The questionnaire was approved by the Department of Student affairs and the invitation to complete the Library Anxiety Questionnaire was sent to all undergraduate students. As all undergraduates receive the questionnaire, those in the target group respond or not according to their disposition. The final sample of 107 students was based on the willingness of the students from the appropriate faculties to complete the questionnaire.

### **3.5.2 Interviews:**

Punch argues the value of the research interview:

“The interview is the most prominent data collection tool in qualitative research. It is a very good way of accessing people’s perceptions, meanings, definitions of situations and constructions of reality” (2014:144).

The purpose of the research interview is to investigate the views, experiences, and beliefs of individuals on a specific matter. The interview can provide an in-depth examination of social phenomena identified in quantitative methods such as questionnaires (Gill et al., 2008:292). Seidman argues that the root purpose of in-depth interviews is the desire to understand the lived experience of individuals and the meaning they attribute to their experiences (2006:8).

Undergraduate students and subject librarians made up two different interview samples. The appropriate sampling method for interviews was determined to be volunteer sampling. The undergraduate student interview sample was based on the willingness of the questionnaire respondents to be interviewed. The librarian interview sample was based on the willingness of subject librarians from the relevant faculties to be interviewed. Seven librarians were approached via email and five indicated a willingness to be interviewed: three Humanities librarians, one Science librarian and one Commerce librarian.

Students were asked to indicate a willingness to be interviewed in the questionnaire. Four students drawn from those who completed the questionnaire were interviewed via telephone - to gain a deeper understanding of the phenomenon from the perspective and experience of those willing to participate in this phase of the study. Librarians were approached via email and were interviewed telephonically. Five subject librarians working in the same faculties as the undergraduate students indicated a willingness to be interviewed.

The purpose of interviewing undergraduate students was to gain a deeper understanding of student experiences, using findings from the survey to formulate questions. The interview allowed an undergraduate student to express feelings and speak about lived experiences in a way that cannot be reflected using a questionnaire. The purpose of interviews with librarians was to gain an alternate perspective of library anxiety based on librarian-student interactions.

### **3.6 Questionnaire Piloting:**

Creswell and Creswell identify the importance of pilot testing as a way in which to improve questions, the format, and instructions of a questionnaire instrument (2018: 154). It was decided that a sample of students from the Faculty of Commerce would be a convenient sample to test the questionnaire, and to find ways in which the contents or structure of the questionnaire can be adjusted. Participants were provided with access to the online questionnaire and were asked to comment on their experience using the questionnaire. The pilot questionnaire was sent out on the 12th of September 2020 and five responses were gathered. The outcome of the survey pilot did not require changes to be made to the final questionnaire.

### **3.7 Data Analysis:**

The two sets of data, quantitative and qualitative were analysed using descriptive analysis and thematic analysis, respectively. Descriptive analysis can be defined as the following:

“Quantitative descriptive analysis characterizes the world or a phenomenon by identifying patterns in data to answer questions about who, what, where, when, and to what extent. Descriptive analysis is data simplification” (Loeb et al., 2017:1).

Descriptive analysis can aid in informing a practitioner about the reality, issues, and other aspects of their system. (Loeb et al., 2017:1). In this research, descriptive analysis could be used to identify patterns in the survey data to explain the causes of library anxiety and the extent to which library anxiety manifests.

Levels of library anxiety were measured using Microsoft Excel from the results of the questionnaire. As the questionnaire used ordinal measurement, the appropriate statistical measurement was the median – the most frequently occurring response for each question. The most frequently occurring responses to the questions were recorded on a scale of 1 to 5 (Strongly disagree to Strongly agree). Considering the phrasing of statements, the following scores were used to calculate levels of library anxiety among the undergraduate participants:

- 1- Strongly disagree proxy for Low Anxiety.
- 2- Disagree proxy for Mild Anxiety.
- 3- No opinion/undecided proxy for No Anxiety

- 4- Agree proxy for Moderate Anxiety.
- 5- Strongly agree proxy for Severe Anxiety.

The qualitative data collected from interviews with students and librarians, was analysed using thematic analysis, a method by which interview data is analysed and interpreted to identify themes or patterns (Clarke & Braun, 2017:297). Thematic analysis assists in identifying patterns in the interview data which relate to interviewees' experiences, thoughts, and behaviour (Clarke & Braun, 2017:297). The thematic analysis identified themes related to the library experience of undergraduate students: Library usage, Purpose for using the library and Library experiences. Data from interviews with librarians identified three themes: Library anxiety, The Librarian-student interaction, and Library anxiety solutions.

### **3.8 Validity and Reliability:**

The Library Anxiety Questionnaire used in this research was adapted from the AQAK library anxiety scale created by Anwar et.al (2011). The proposed AQAK scale was tested in three phases, analysed using multiple statistical analyses and determined to be very valid and reliable (Anwar et al., 2011:44-45). The adjusted questionnaire, The Library Anxiety Questionnaire, was pilot tested to further ensure the validity of the questionnaire. The pilot testing resulted in no changes needing to be made. The mixed methods nature of the research intended to ensure validity of the findings. Results of the questionnaire were further investigated by interviewing undergraduate students and librarians.

### **3.9 Ethical Considerations:**

The University of Cape Town, Humanities Faculty Guide to Research Ethics states four important ethical considerations for research involving human participants:

1. Research participants should not be harmed during or as a consequence of research.
2. Research participants should give informed, voluntary consent, when appropriate, to participation in research.

3. Researchers should respect the right of individuals to refuse to participate or, having agreed to participate, to withdraw their consent at any stage without prejudice.
4. The privacy and confidentiality interests of participants must be considered in the research process.

This research adopted the four ethical considerations listed above, which informed every aspect of the research process.

1. Research participants should not be harmed in the process of research.

The research process was approached with the strict intention to conduct research which would not harm any participant.

2. Research participants should give researchers informed consent when participating in research.

Informed consent can be defined as the process whereby participants give their permission to be interviewed or observed, knowing fully the purpose of the research and the potential consequences of participating (Piper & Simons, 2005:56). Informed consent was required of each participant before interviews took place.

3. Research participants have the right to withdraw from participating.

All questionnaire and interview participants were approached with the clear understanding of the right of participants to withdraw their consent at any point in the research process without needing to give a reason.

4. Research participants have the right to confidentiality and anonymity.

Information is usually given with the expectation that it will be made public. It is the job of the researcher to generate information from respondents and to disseminate the findings emerging from the data. It is however ethical for researchers to keep any information gathered in the research process confidential (Walford, 2005:85). Piper and Simons define confidentiality as a principle which ensures that individuals can

speak in confidence and can refuse the publication of information that could harm them in any way (2005:57).

Anonymising participants can be described as a way in which to protect the privacy and confidentiality of an individual (Piper & Simons, 2005:57). Walford further defines anonymity as a straightforward principle which states that no person involved in research is to be named nor any information that can lead to their identification should be included in the research (2005:84).

Confidentiality and anonymity informed the way in which surveys and interviews were conducted. Participants had the right to choose what information they would disclose and whether any information would be excluded from interviews. All surveys would remain anonymous except for participants who willingly provided an email address. No participant would be named in interviews and a pseudonym would be provided where necessary. No personal information would be included in final data. This would ensure anonymity and eliminate the risk that participants could be identified.

### **3.10 Conclusion:**

Chapter 3 presented the approach, design and methodology used in this study. Chapter 4 presents the findings of the Library Anxiety Questionnaire and interviews with undergraduate students and academic libraries.

## CHAPTER 4 - PRESENTATION OF FINDINGS

### 4.1. Introduction:

Mellon defined library anxiety as anxiety that results from the inability of students to approach information needs in a library logically and efficiently (1986:279). To understand the phenomenon of library anxiety, a sample of undergraduate students from the Faculties of Humanities, Commerce and Science at the University of Cape Town (UCT) were asked to complete the Library Anxiety Questionnaire, designed for the purpose (Appendix A). To gain a more nuanced understanding the phenomenon of library anxiety, four undergraduate students who had completed the Library Anxiety Questionnaire were interviewed. Five academic librarians working with students from the relevant faculties were interviewed to gain their perspective of the phenomenon.

The findings are presented in the following order: results of the questionnaire, analysis of interview with students, analysis of interview with librarians.

### 4.2 The Library Anxiety Questionnaire:

The Library Anxiety Questionnaire (Appendix A) used in this study was adapted from the AQAK Library Anxiety Scale (Anwar et al., 2011). Four statements were excluded from the original AQAK as they were not applicable to the UCT context. My adapted questionnaire consisted of 36 statements addressing various aspects of the library experience.

The questionnaire aimed to provide insight into the following critical questions:

1. How do undergraduate students experience the COL library?
2. Do current UCT undergraduate students experience library anxiety and how does it manifest?

Students were asked to respond to the 36 statements, choosing one of the following responses:

- 1) Strongly Disagree
- 2) Disagree
- 3) No Opinion/Undecided

4) Agree

5) Strongly agree

A sample could not be drawn as the questionnaire was distributed online to all undergraduate students, regardless of faculty location. Constraints resulting from Covid-19 restrictions are discussed in Chapter 5 (section 5.2.). This is the method adopted by the UCT Student Affairs Department which handles all requests to conduct research with the university students, and which itself dispatches the questionnaire. Thus, 107 undergraduate students completed the Library Anxiety Questionnaire, sent to them electronically. The students were from the Faculties of Commerce, Humanities and Science. Table 4.1 presents the distribution of participants according to faculty.

Commerce	44
Humanities	51
Science	12

Table 4.1 Participant Distribution

The 36 statements have been divided into six themes reflecting a similar structure to Anwar et al. (2011). The 36 statements reflect following aspects of the library experience: Library staff, Library Environment, Library Resources and Services, Library Policies, ICTs, and Information Literacy. The responses to each of the 36 statements are presented under the appropriate themes, in the order indicated in the first sentence of this paragraph. A pie chart, representing the responses to the questions in each section is presented, showing the breakdown of responses in each of the five possible categories of response. The categories Strongly Agree and Agree as well as Strongly Disagree and Disagree have been aggregated in analysis to simplify the results into three groups Agree, Disagree and No Opinion/Undecided. The pie chart is followed in each instance by a narrative report presenting the analysis showing general trends created by aggregating the two categories of negative responses, and the two categories of the favourable responses similarly aggregated.

#### 4.2.1 Library Staff:

Ten statements addressed library staff and aimed to elicit students' feelings towards librarians including the librarian-student interactions as well as services provided by librarians. Table 4.2 presents the statements about library staff provided in the questionnaire; this is followed by the findings for each statement. Figures 4.1 to 4.10 display the percentages of responses to the statements set out in Table 4.2 below.

S1*	The library staff is unfriendly.
S2	The library staff guides students to find information.
S7	The library staff is approachable.
S8	There is often someone available in the library to help me.
S9	The library staff is not helpful
S16	The library staff does not care about students' needs.
S20	The library staff provides help on how to use databases
S24	The librarians do not provide training on how to use the databases
S27	The librarians conduct classes on how to search, evaluate, and use information
S33	The library staff seems to be busy and not available for assistance.

Table 4.2 - Library Staff Statements

\* S refers to the relevant statement in the questionnaire.

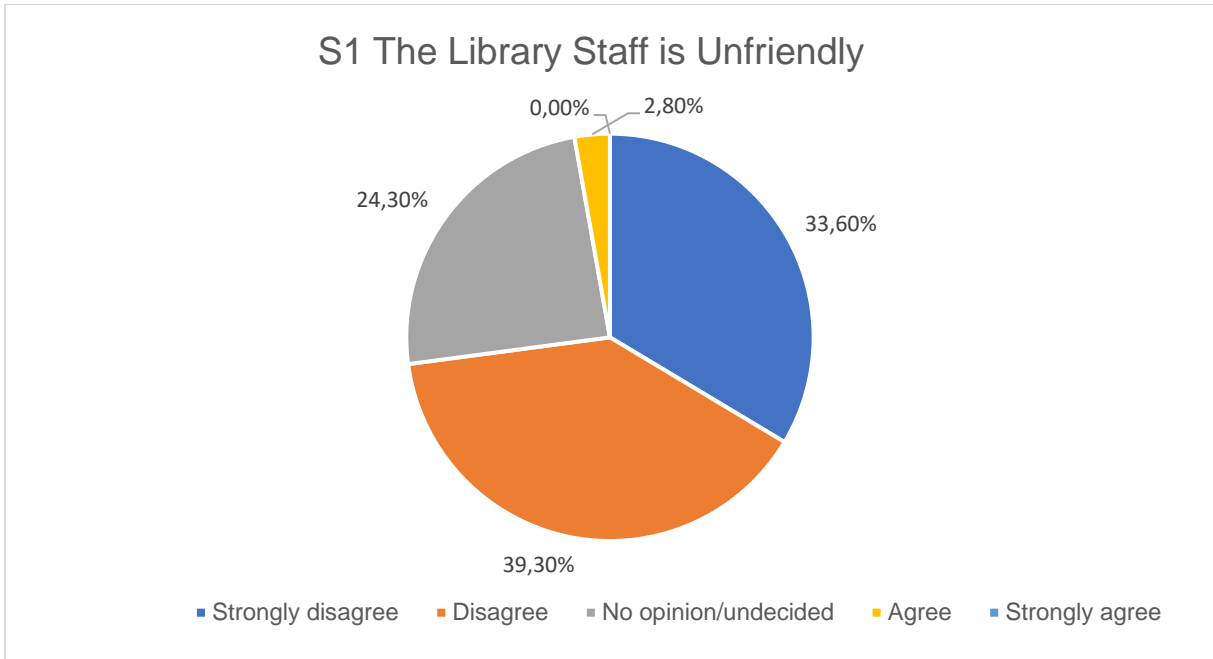


Figure 4.1 Statement 1

The percentage of responses that disagreed with the statement far outweighs the percentage of responses that agreed as indicated in this breakdown: 72.9% disagreed with Statement 1 and 2.8% agreed with the statement indicating that these students find library staff unfriendly. A further 24.3% of responses indicated neutrality.

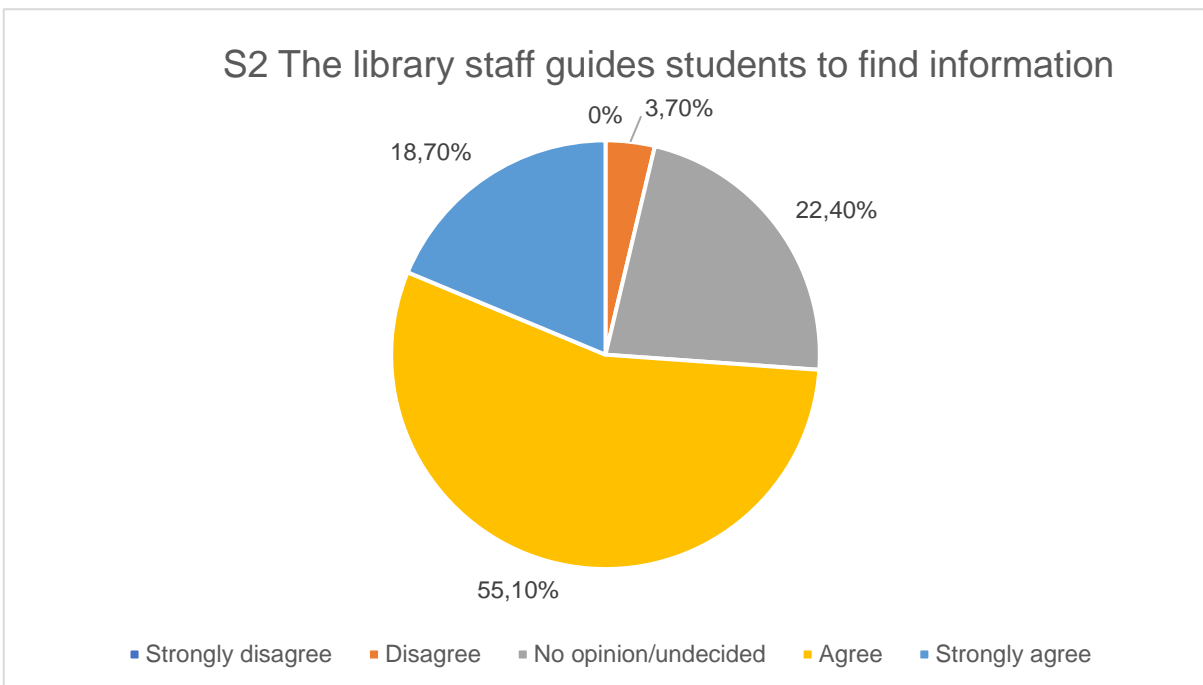


Figure 4.2 - Statement 2

The percentage of responses to Statement 2 which agreed outweighs the percentage of responses that disagreed as indicated in this breakdown: 73.8% agreed with Statement 2 and 22.4% disagreed with the statement indicating that the library does not guide these students to find information. A further 22.4% indicated neutrality.

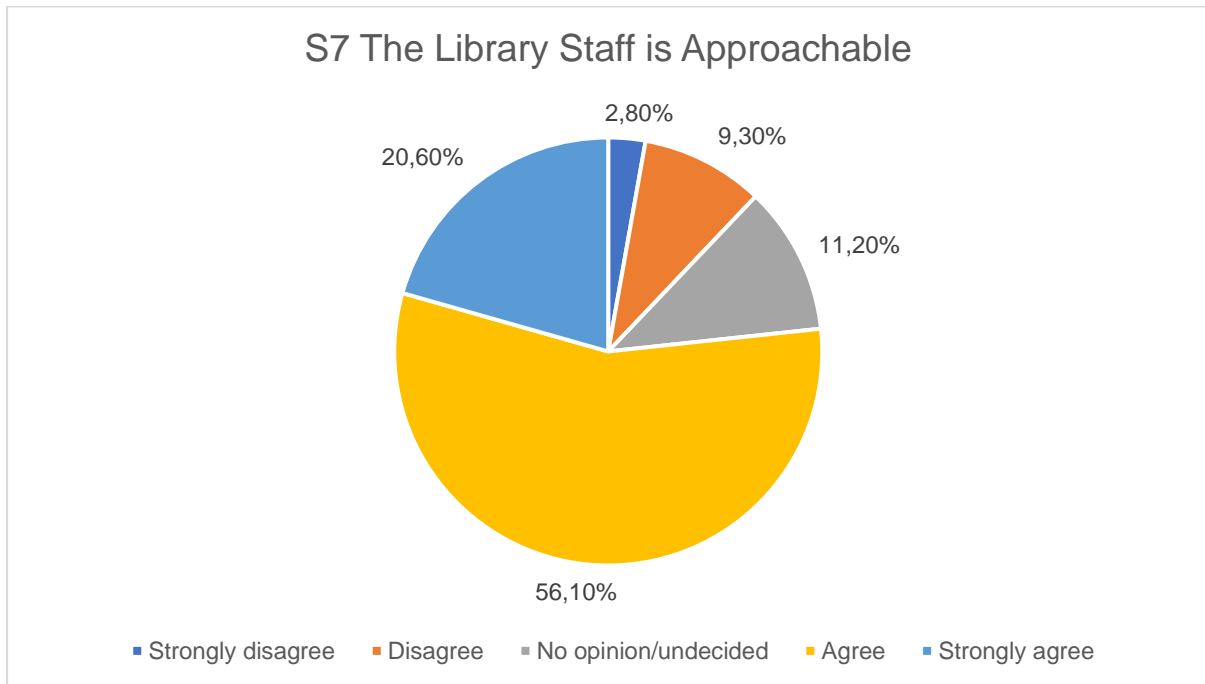


Figure 4.3 - Statement 7

The percentage of responses that agreed with Statement 7 far outweighs the responses that disagreed as indicated in this breakdown: 76.7 % agreed with Statement 7 and 12.1% disagreed with the statement indicating that these students do not find library staff approachable. A further 11.2% indicated neutrality.

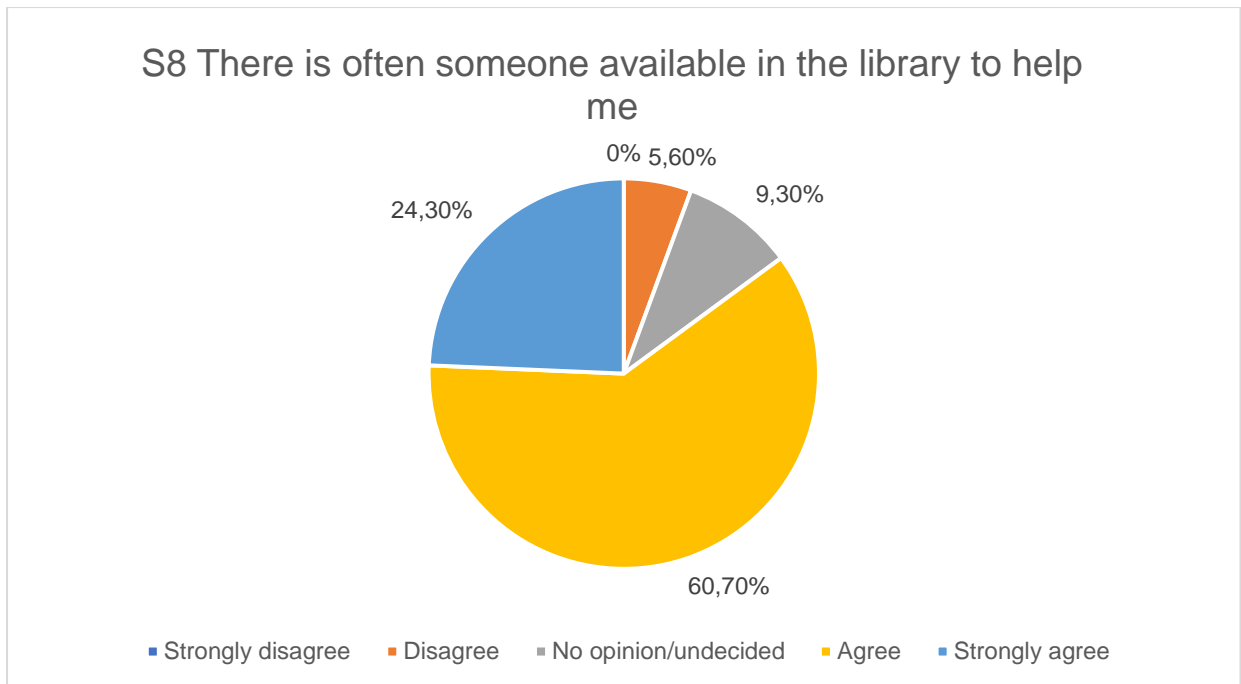


Figure 4.4 - Statement 8

The percentage of responses that agreed with Statement 8 far outweighs the responses that disagreed as indicated in this breakdown: 85% of responses agreed with Statement 8 and 5.6% disagreed with the statement indicating that these students do not often find someone available in the library to help them. Nine-point three percent of responses indicated neutrality.

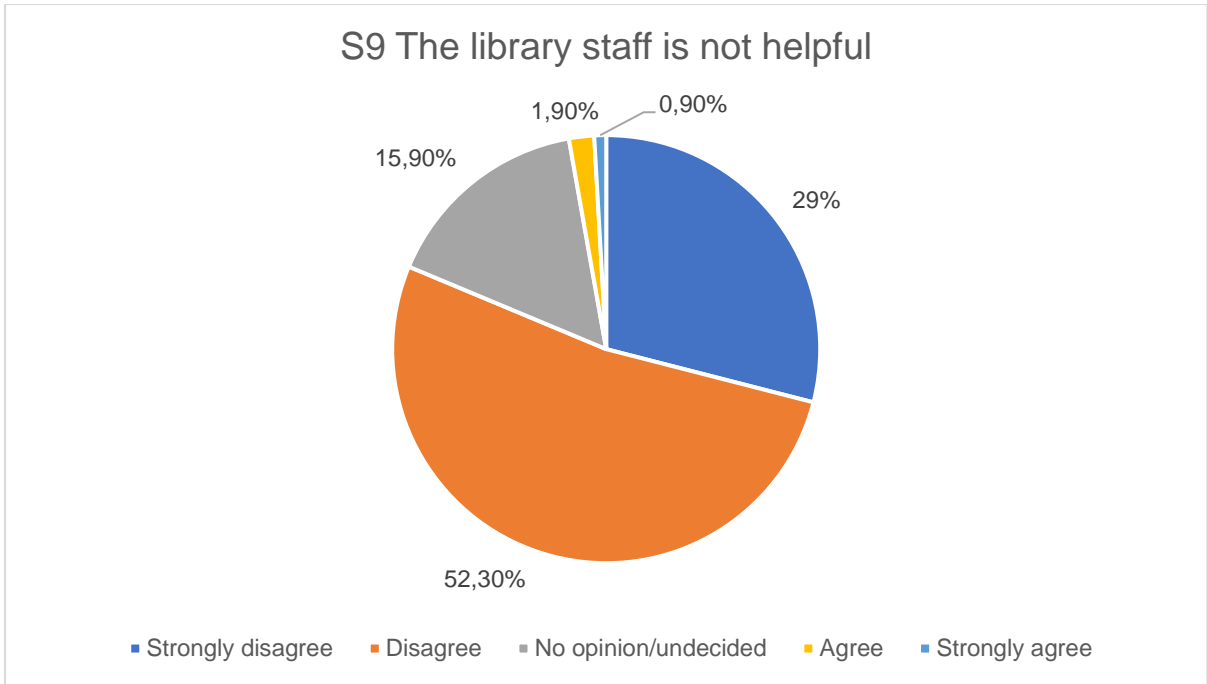


Figure 4.5 - Statement 9

The percentage of responses that agreed with Statement 9 was very small in comparison to the responses that disagreed as indicated in this breakdown. Thus, 81.3% of responses disagreed with Statement 9 indicating that these students find library staff helpful and only 2.8% agreed with the statement. A further 15.9% of responses indicated neutrality.

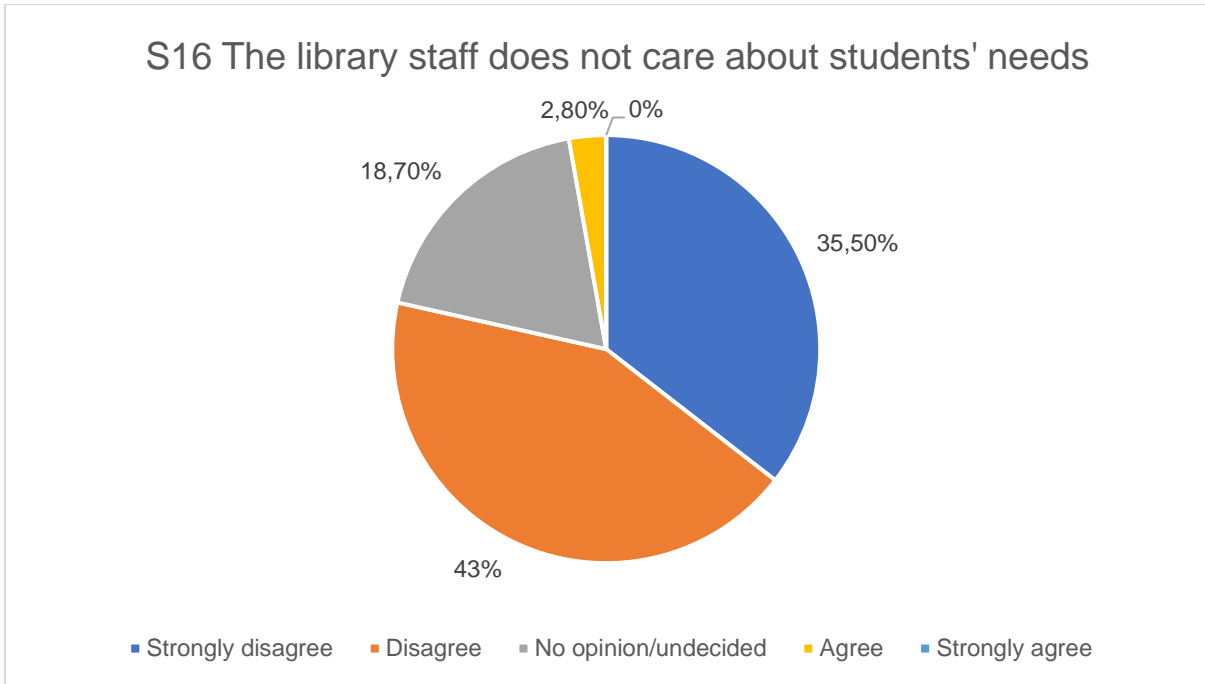


Figure 4.6 - Statement 16

The percentage of responses that agreed with Statement 16 was very small in comparison to the responses that disagreed as indicated in this breakdown: 78.5% of responses disagreed with Statement 16 indicating that these students feel library staff do care for students and 2.8% agreed with the statement. A further 18.7% of responses indicated neutrality.

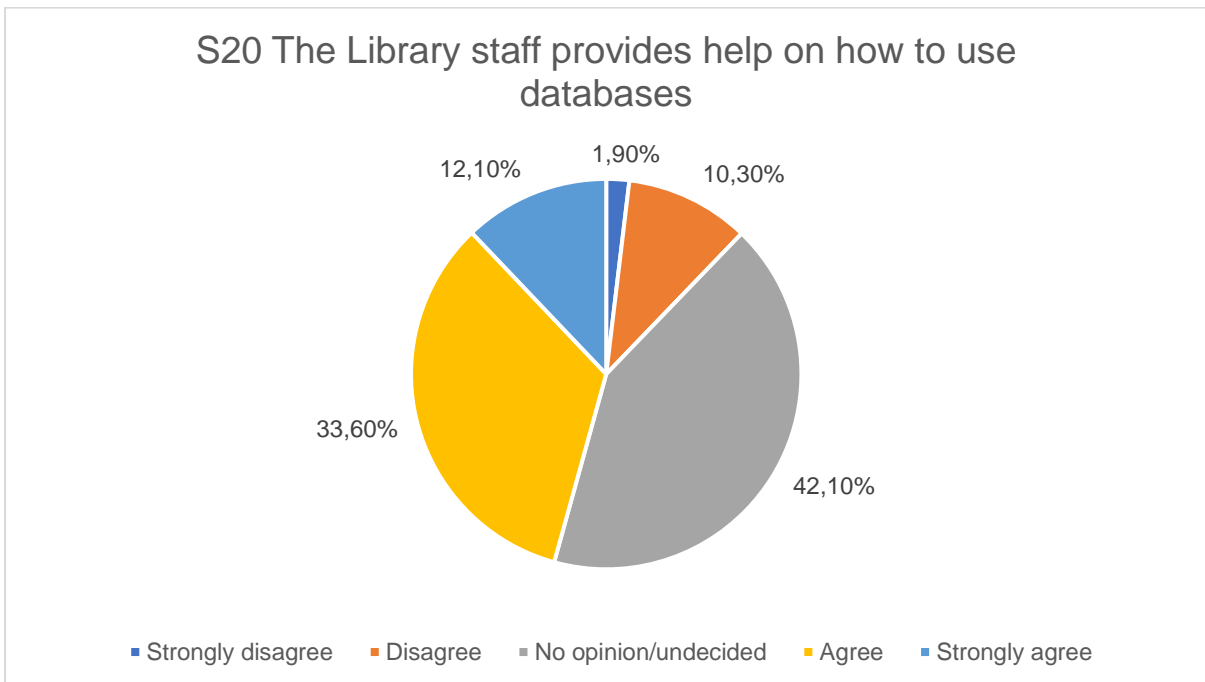


Figure 4.7 - Statement 20

The difference in responses that agreed with Statement 20 and those that indicated neutrality is small as indicated in this breakdown: 45.7% of responses agreed with Statement 20 and 42.1% of responses indicated neutrality. A much smaller percentage, 12.2%, disagreed with the statement indicating that the library staff does not provide these students with help on how to use databases.

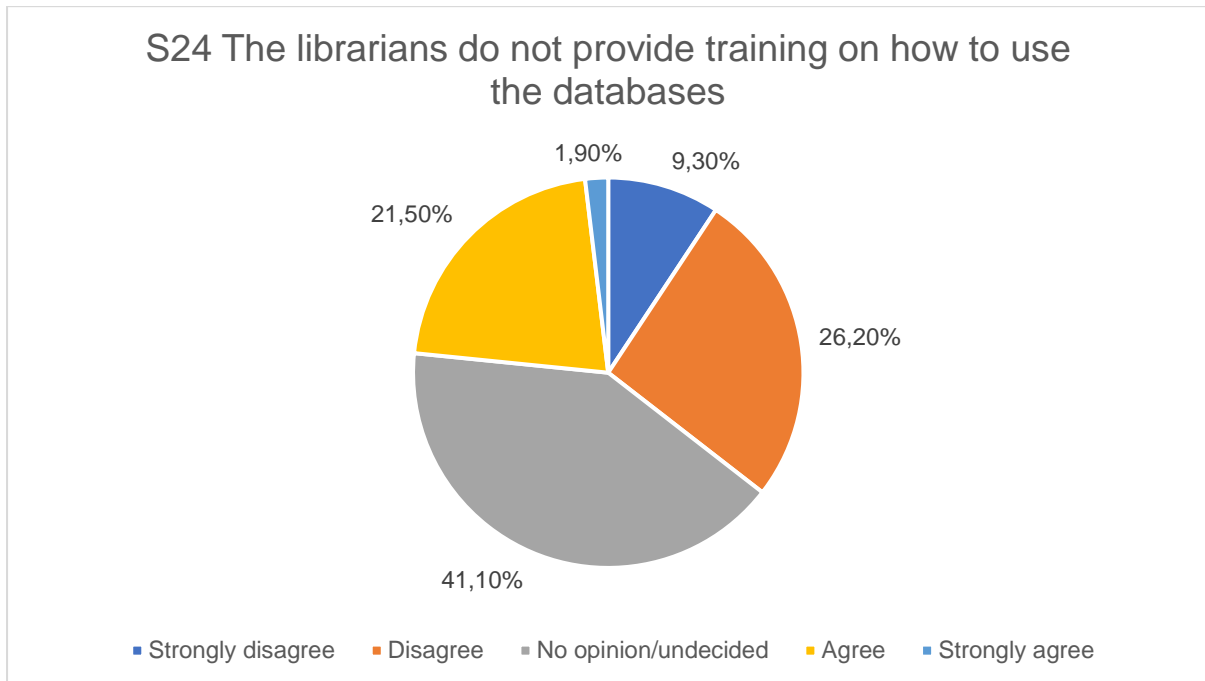


Figure 4.8 - Statement 24

The highest percentage of responses (41.1%) indicated neutrality to the statement while the difference between responses that disagreed and those that agreed was small as indicated in this breakdown: 35.5% of responses disagreed with Statement 24 indicating that these students have received training on how to use databases. A smaller number, 23.4% agreed with the statement. The high incidence of No opinion/Undecided responses is addressed in Chapter 5 (Section 5.4)

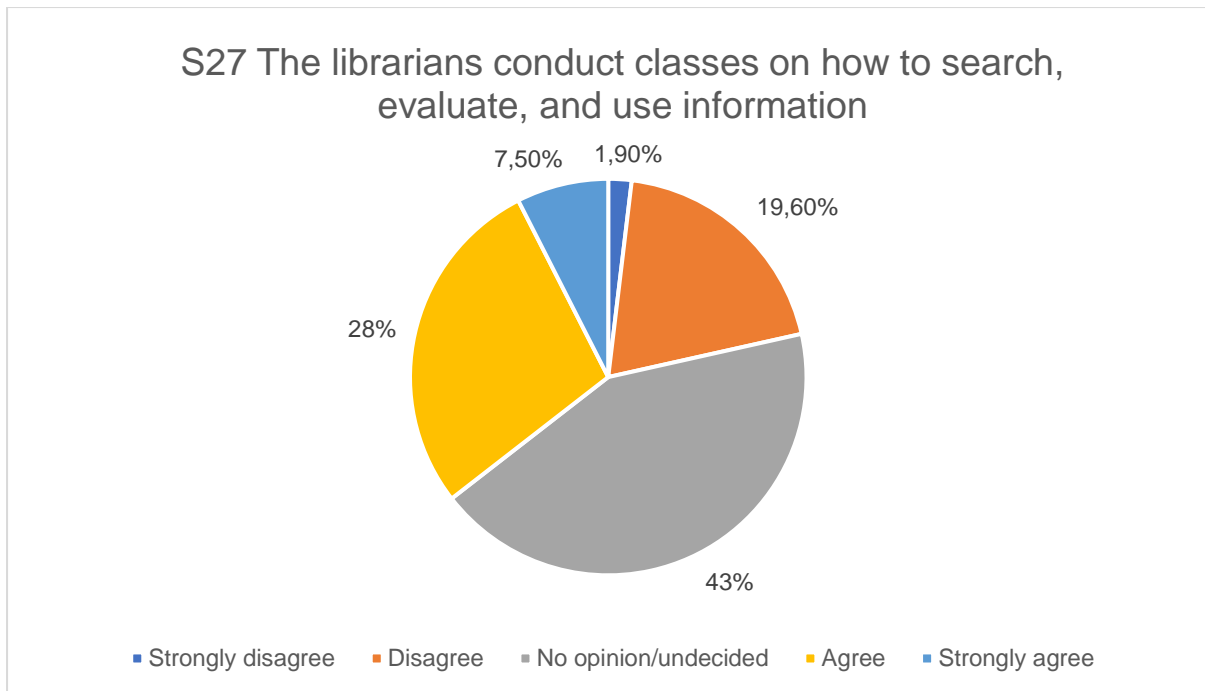


Figure 4.9 - Statement 27

The highest percentage of responses indicated neutrality to the statement while the difference between responses that agreed and those that disagreed was small as indicated in this breakdown: 43% of responses indicated neutrality. Thirty-five-point five percent of responses agreed with Statement 27 and 21.5% disagreed with the statement indicating that these students believe that the library staff does not conduct classes on how to search, evaluate and use information.

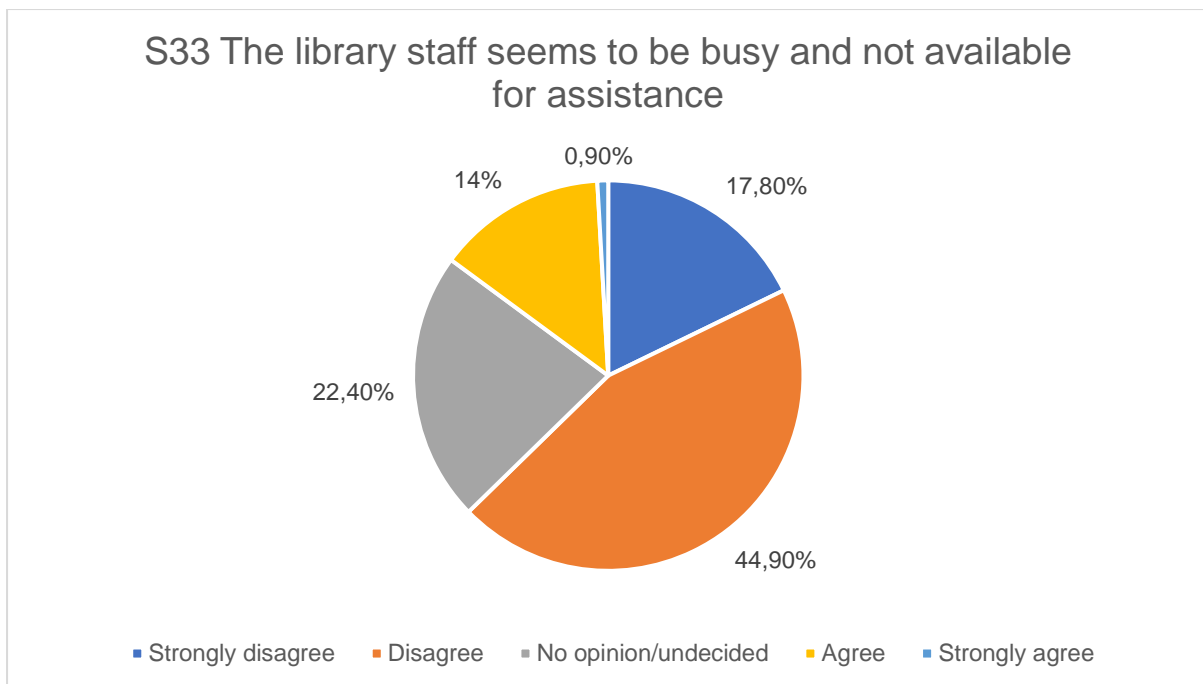


Figure 4.10 - Statement 33

There is a significant difference between responses that agreed with Statement 33 and those that disagreed as indicated in this breakdown: 14.9% agreed with Statement 33 and 62.7% disagreed with the statement, indicating that these students feel that library staff are available for assistance. A further 22.4% of responses indicated neutrality.

Summary of responses to statements about Library staff:

The greatest percentage of responses indicated that:

- The library staff is friendly.
- The library staff guides students to find information.
- The library staff is approachable.
- There is often someone available in the library to help students.
- The library staff is helpful.
- Librarians care about students' needs.
- Librarians are available to assist students.

With regards to the following statements the most frequently chosen response was No Opinion/Undecided:

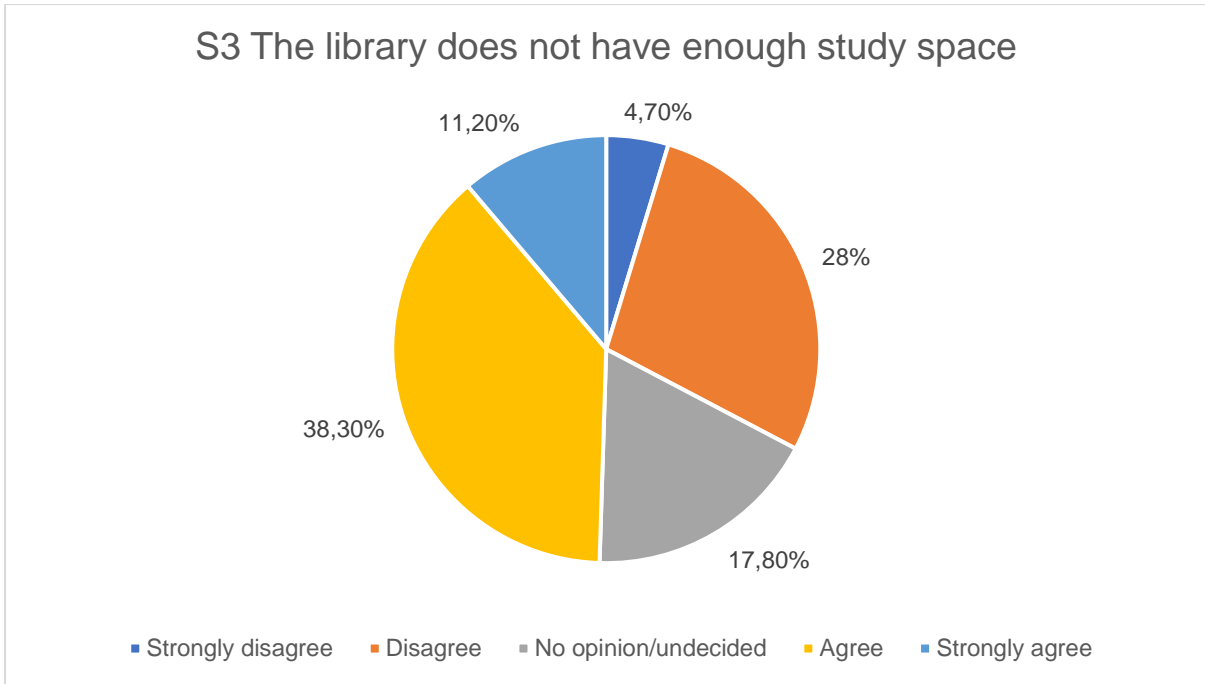
- The library staff provides help on how to use databases.
- The librarians do not provide training on how to use the databases.
- The librarians conduct classes on how to search, evaluate, and use information.

#### 4.2.2 Library Environment:

Seven statements, set out in Table 4.3, addressed the library environment and aimed to elicit students' feelings about the library environment including library space, atmosphere, and décor). This is followed by Figures 4.11 to 4.17 which display the percentages of responses to the statements as listed in Table 4.3.

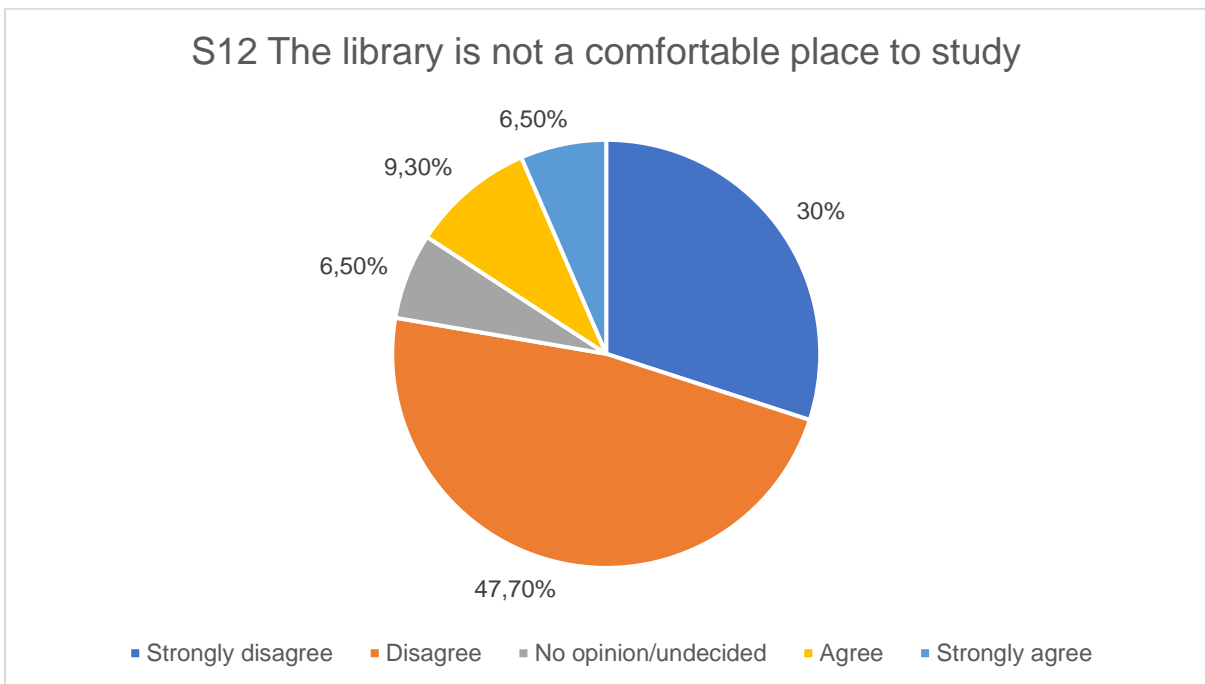
S3	The library does not have enough study space.
S12	The library is not a comfortable place to study
S19	I can find a place to study in the library
S21	The library provides enough quiet spaces to study
S25	The library atmosphere encourages me to use the library.
S28	The decor in the library is good (e.g., colour, lighting, plants, etc.)
S31	The temperature in the library is comfortable

Table 4.3 - Library Environment Statements



**Figure 4.11 - Statement 3**

The difference between the percentage of responses that agreed and those that disagreed with Statement 3 was very small as indicated in this breakdown: 49.5% agreed with Statement 3 indicating that the library does not have enough study space for these students. Forty-five-point eight percent disagreed with the statement indicating that the library has enough study space for these respondents. A further 17.8 % of responses indicated neutrality.



**Figure 4.12 - Statement 12**

The percentage of responses that disagreed with Statement 12 far outweighs the percentage of responses that agreed as indicated in this breakdown: 77.9% disagreed with Statement 12, indicating that the library is a comfortable place to study for these students. Fifteen-point eight percent agreed with the statement indicating that the library is not a comfortable place for these students to study and a further 6.5% of responses indicated neutrality.

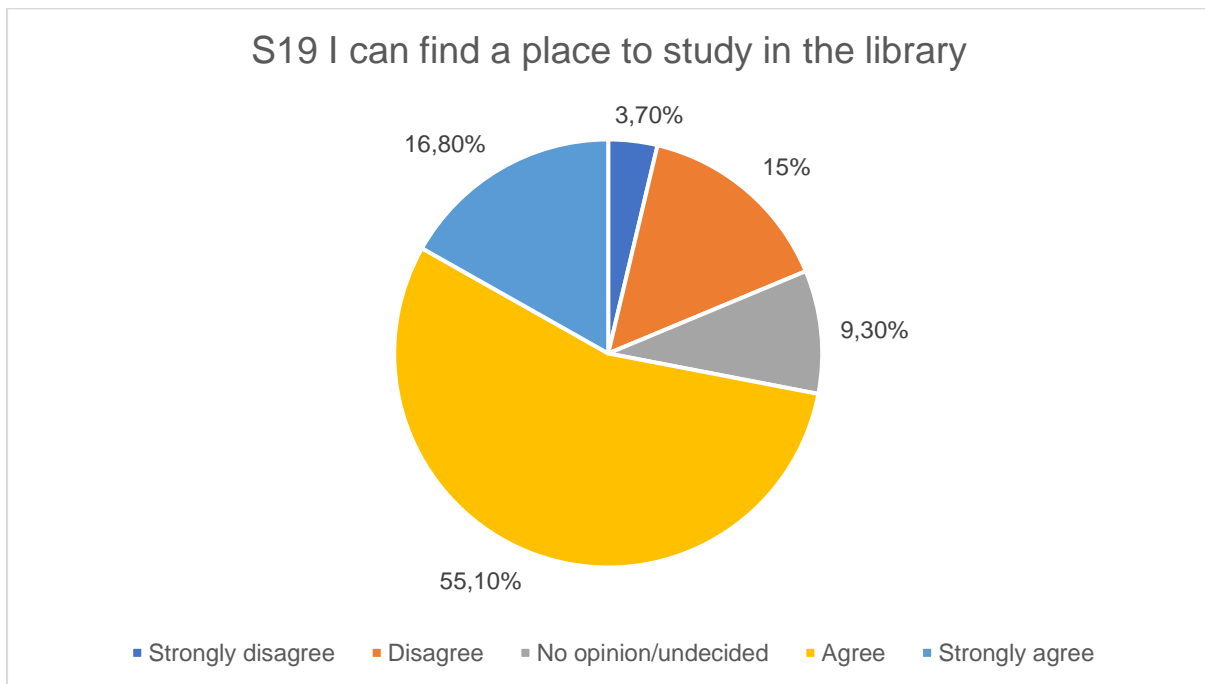


Figure 4.13 - Statement 19

The percentage of responses that agreed with Statement 19 is significantly higher than those who disagreed as indicated in this breakdown: 71.9% agreed with Statement 19 indicating that they are able to find a place to study, while 18.7% disagreed with the statement indicating that these students are unable to find a place to study in the library and 9.3% of responses indicated neutrality.

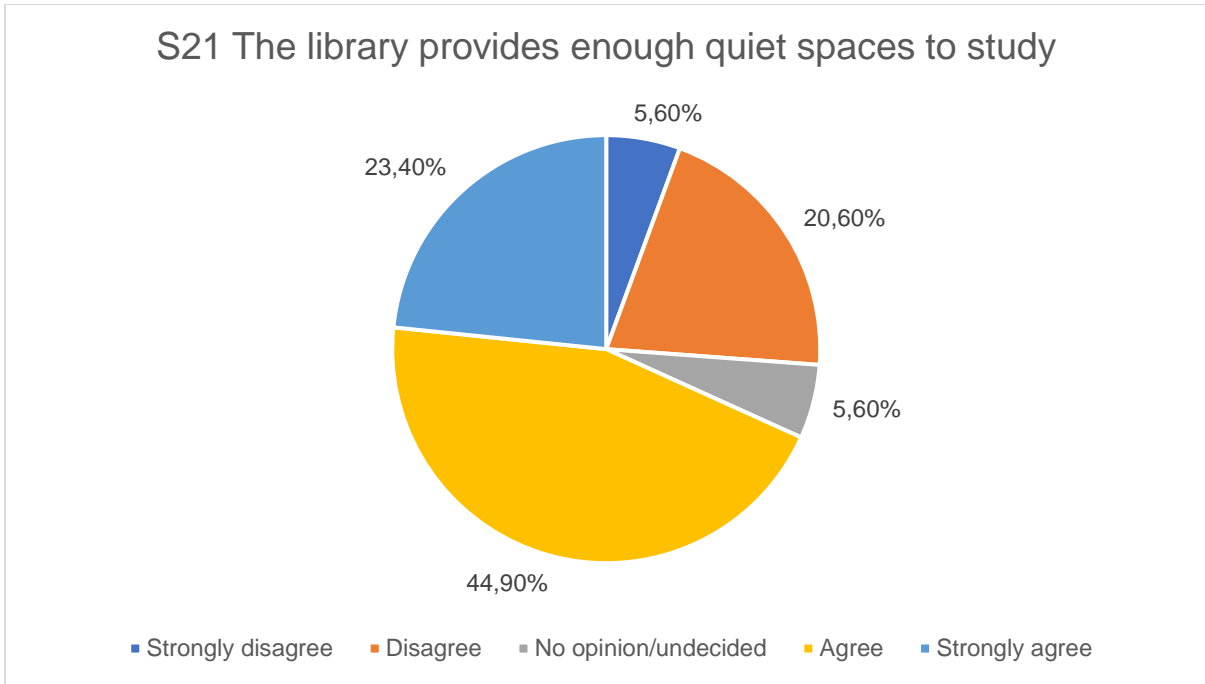


Figure 4.14 - Statement 21

There is a sizeable difference between responses that agreed and those that disagreed with Statement 21 as indicated in this breakdown: 68.3% agreed with Statement 21, 26.2% disagreed with the statement indicating that the library does not provide enough quiet spaces to study for these students and 5.6% of responses indicated neutrality.

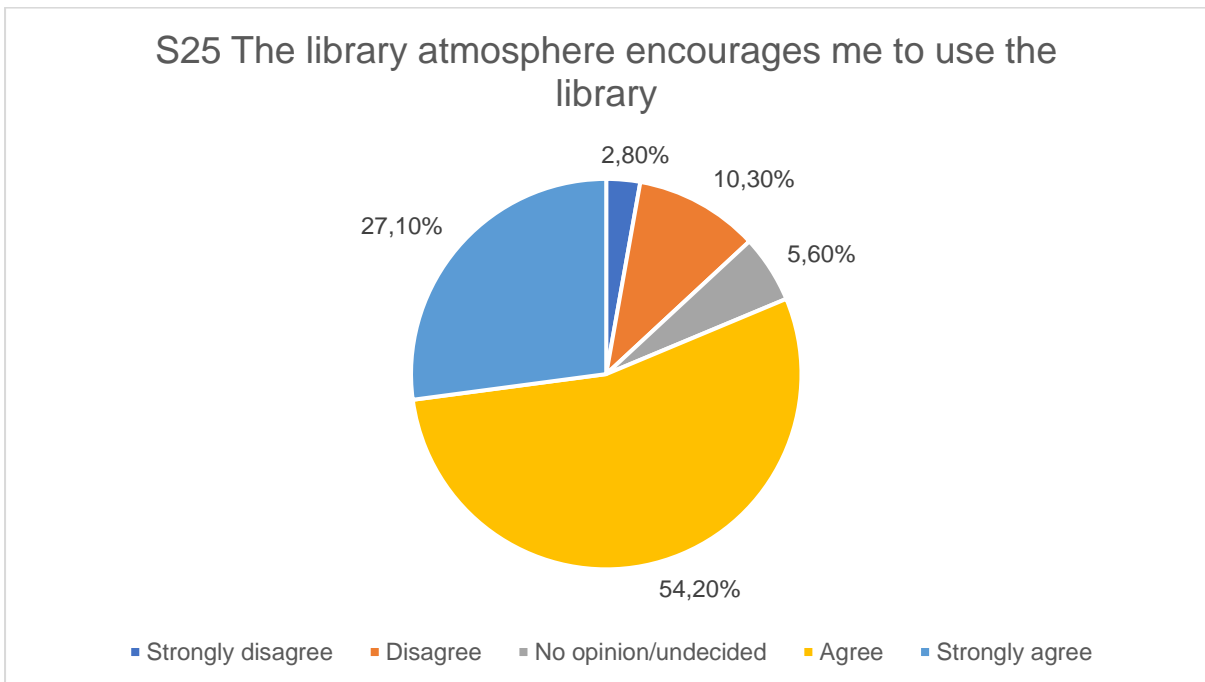


Figure 4.15 - Statement 25

The responses that agree with Statement 25 far outweigh those that disagree as indicated in this breakdown: 81.3% agreed with Statement 25, 13.1% disagreed with the statement indicating that the library atmosphere does not encourage them to use the library. A further 5.6% of responses indicated neutrality.

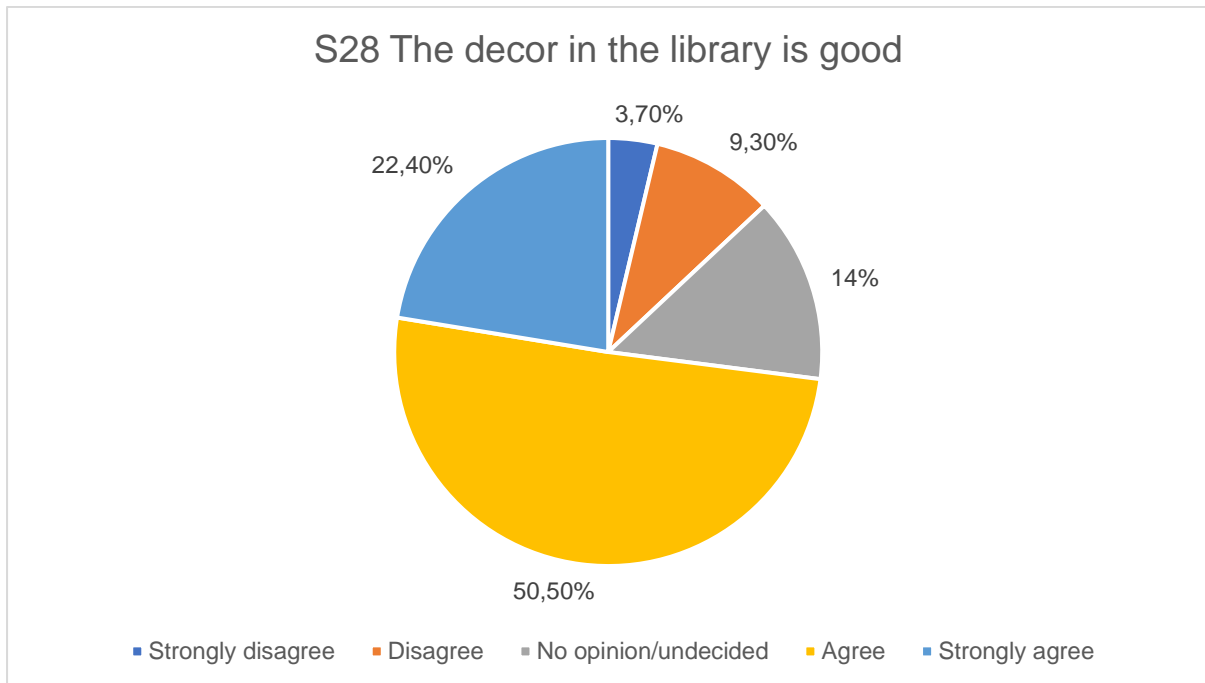


Figure 4.16 - Statement 28

The responses which agreed with Statement 28 were significantly higher than those which disagreed as indicated in this breakdown: 72.9% agreed with Statement 28, and 13% disagreed with the statement indicating that these students do not feel that library décor is good. A further 14% of responses indicated neutrality.

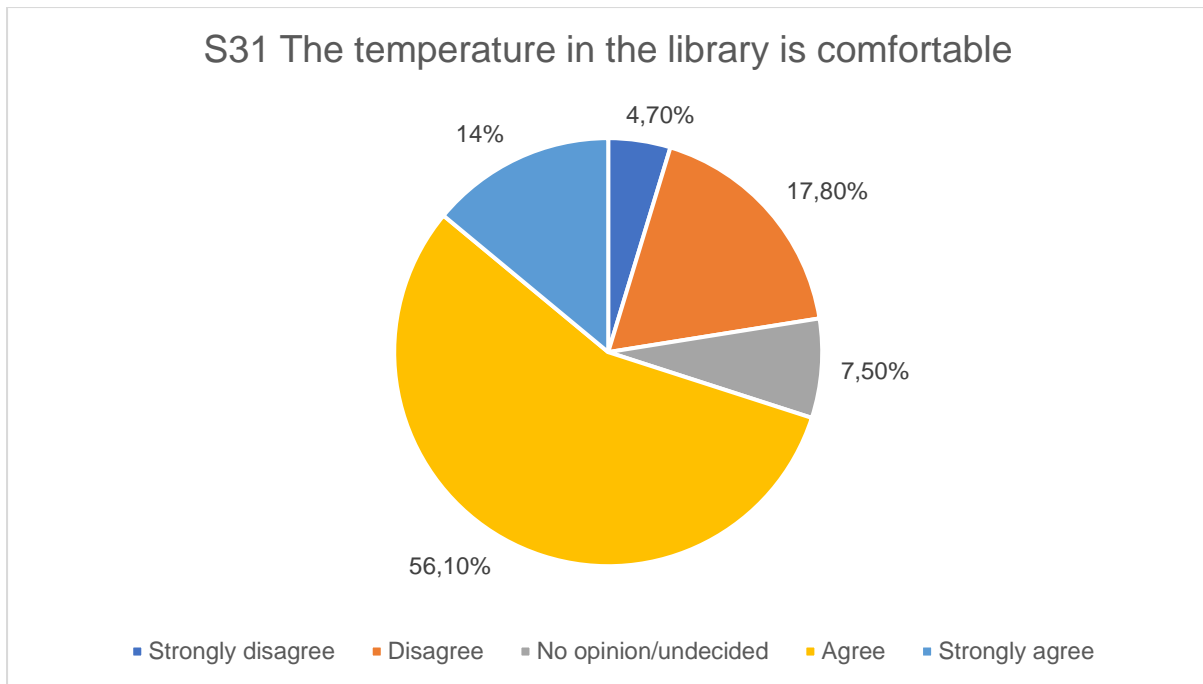


Figure 4.17 - Statement 31

There is a significant difference between responses that agreed with Statement 31 and those that disagreed as indicated in this breakdown: 70.1% agreed with Statement 31, and 22.5% disagreed with the statement indicating that the library temperature is uncomfortable for these students. A further 7.5% of responses indicated neutrality.

Summary of responses to statements about Library environment:

The greatest percentage of responses indicated that:

- The library does not have enough general study space.
- The library is a comfortable place to study.
- Students do not often find a place to study in the library.
- The library provides enough quiet study spaces.
- The library atmosphere encourages students to use the library.
- The decor in the library is good (e.g., colour, lighting, plants, etc.)
- The temperature in the library is comfortable.

### 4.2.3 Library resources and services:

Six statements addressed the library resources and services and aimed to elicit opinions about these resources and services. Table 4.4 presents the statements provided in the questionnaire. This is followed by Figures 4.18 to 4.23 which display the percentages of responses to these statements.

S5	The library arranges instructional activities (tours, lectures, workshops etc.) on how to use the library
S6	I cannot find journal issues on the shelf even though they are indicated by the catalogue as available in the library.
S11	Reference (user assistance) services in the library are readily available.
S15	The library does not have a sufficient number of journal titles related to my area of study
S17	I can find the books that I need in the library most of the time
S22	The library does not have a sufficient number of books to cover my information needs.

Table 4.4 - Library Resources and Services Statements

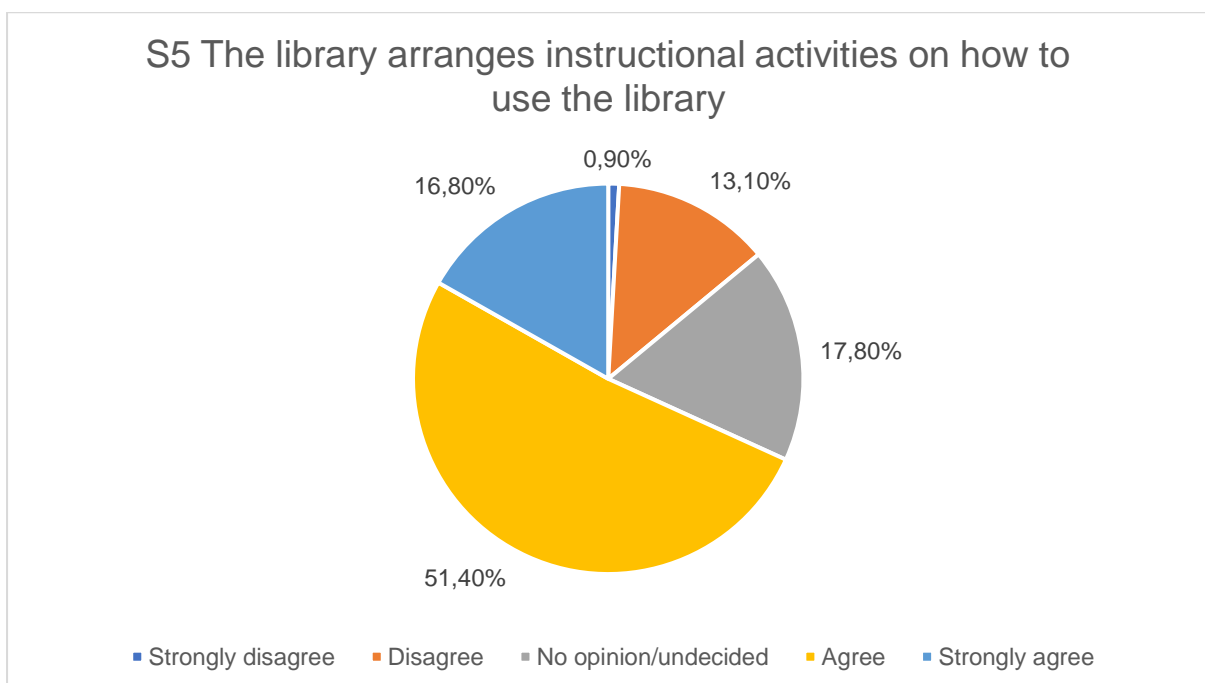


Figure 4.18 - Statement 5

The difference in percentage of responses that disagreed with Statement 5 and those that agreed is sizeable as indicated in this breakdown: 68.2% agreed with Statement

5 and 14% indicated that they disagree with the statement, indicating that these students feel that the library does not arrange instruction activities on how to use the library. A further 17.8% of responses indicated neutrality.

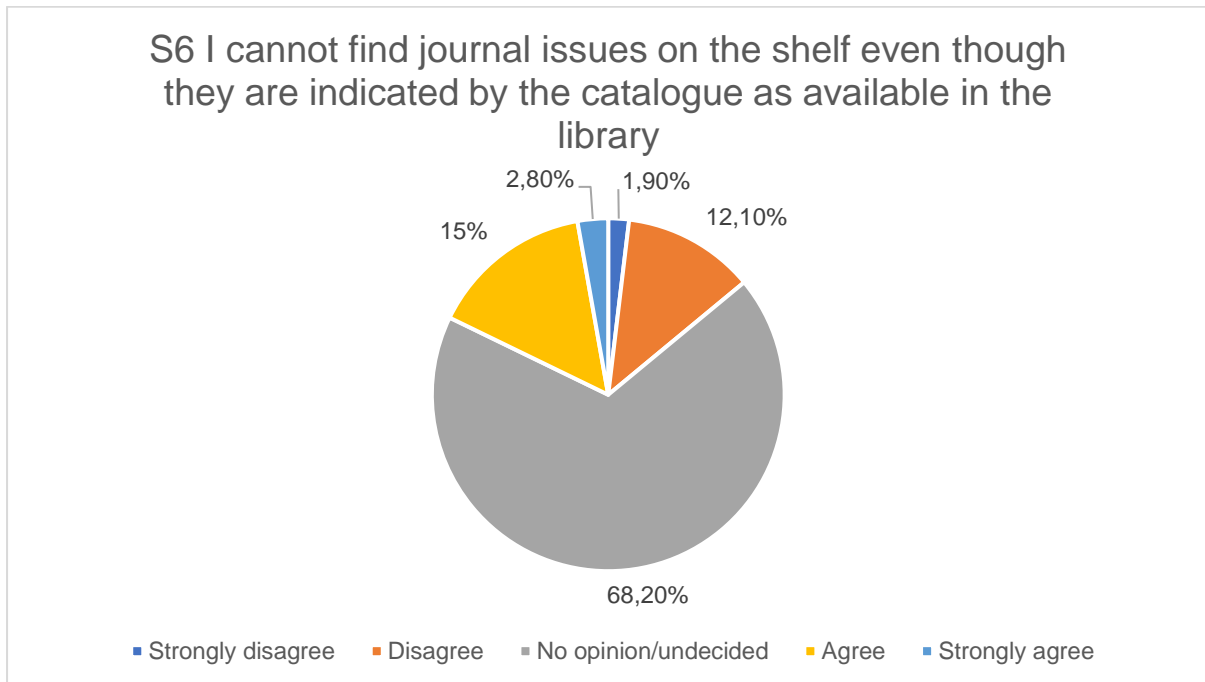


Figure 4.19 - Statement 6

The highest percentage of responses indicated neutrality and the difference in percentage of responses that disagreed with and those that agreed is very small as indicated in this breakdown: 68.2% of responses indicated neutrality and 17.8% agreed with Statement 6. A further 14% disagreed with the statement indicating that they are able to find journal issues on the shelf.

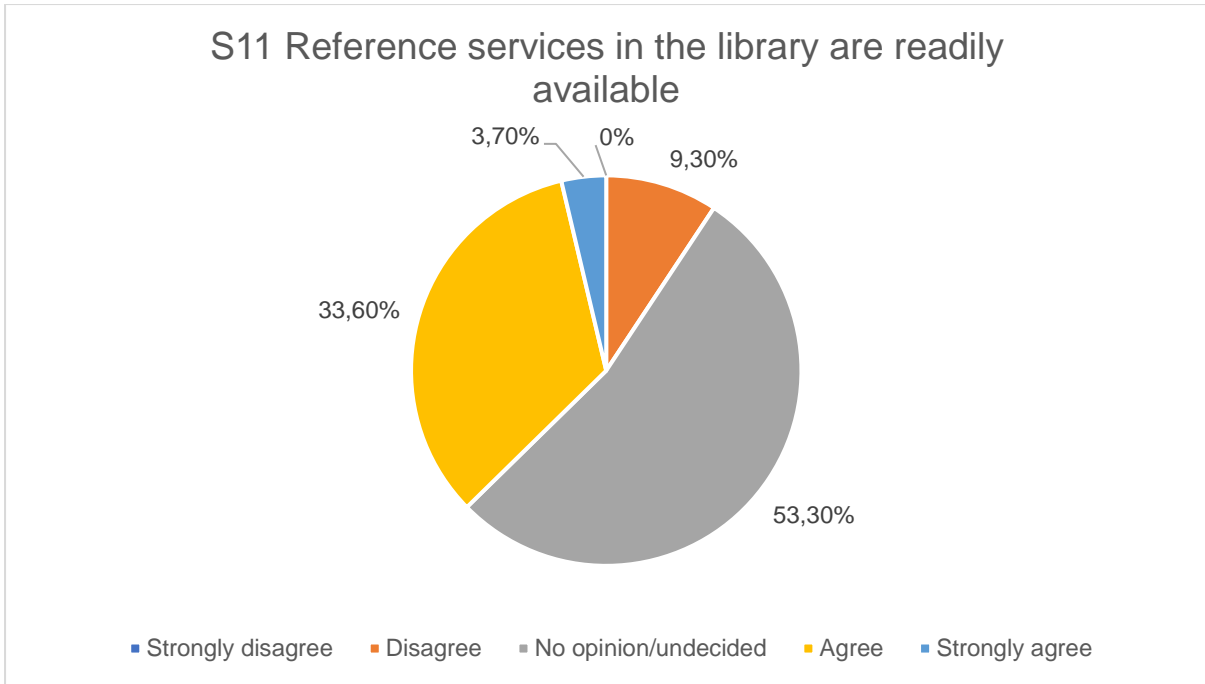


Figure 4.20 - Statement 11

The highest percentage of responses indicate neutrality and the difference in percentage of responses that agreed and those that disagreed is sizeable as indicated in this breakdown: more than half the respondents, 53.3%, had no opinion on the Statement and 37.3% agreed with Statement 11. A further 9.3% disagreed with the statement indicating that reference services are not readily available.

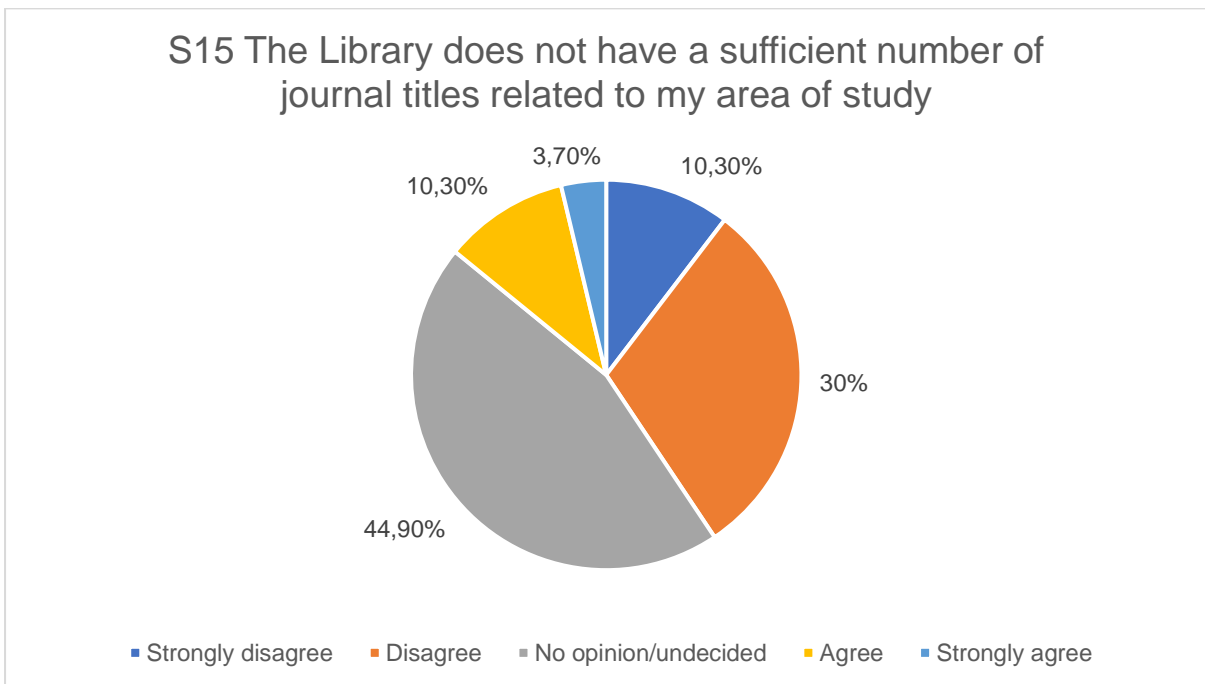


Figure 4.21 - Statement 15

The highest percentage of responses indicate neutrality and the difference in percentage of responses that disagreed and those that agreed is significant as indicated in this breakdown: 44.9% of responses indicated neutrality and 14% agreed with Statement 15. A large percentage, 40.3% disagreed with the statement indicating that the library has a sufficient number of journal titles related to students' areas of study.

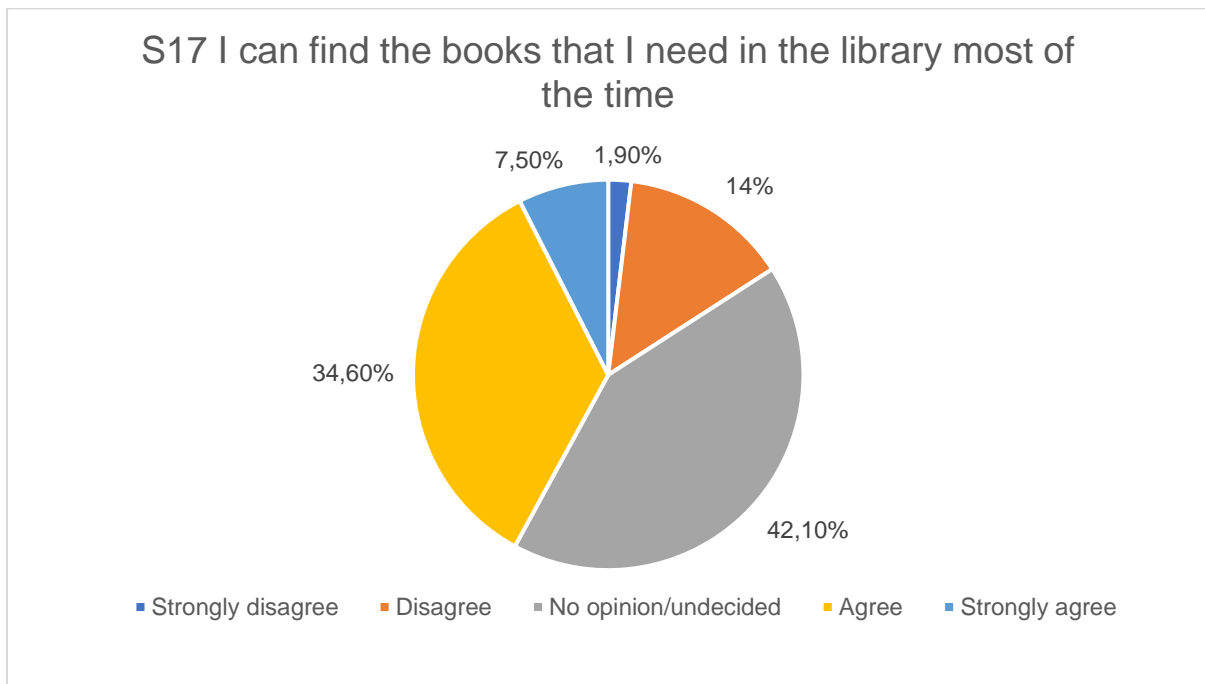


Figure 4.22 - Statement 17

The difference in percentage of responses that disagree with Statement 17 and those that agree is sizeable as indicated in this breakdown: 42.1% agreed with Statement 17 and 15.9% disagreed, indicating that they cannot often find books that they need in the library. A sizeable number (42.1 %) of responses indicated neutrality.

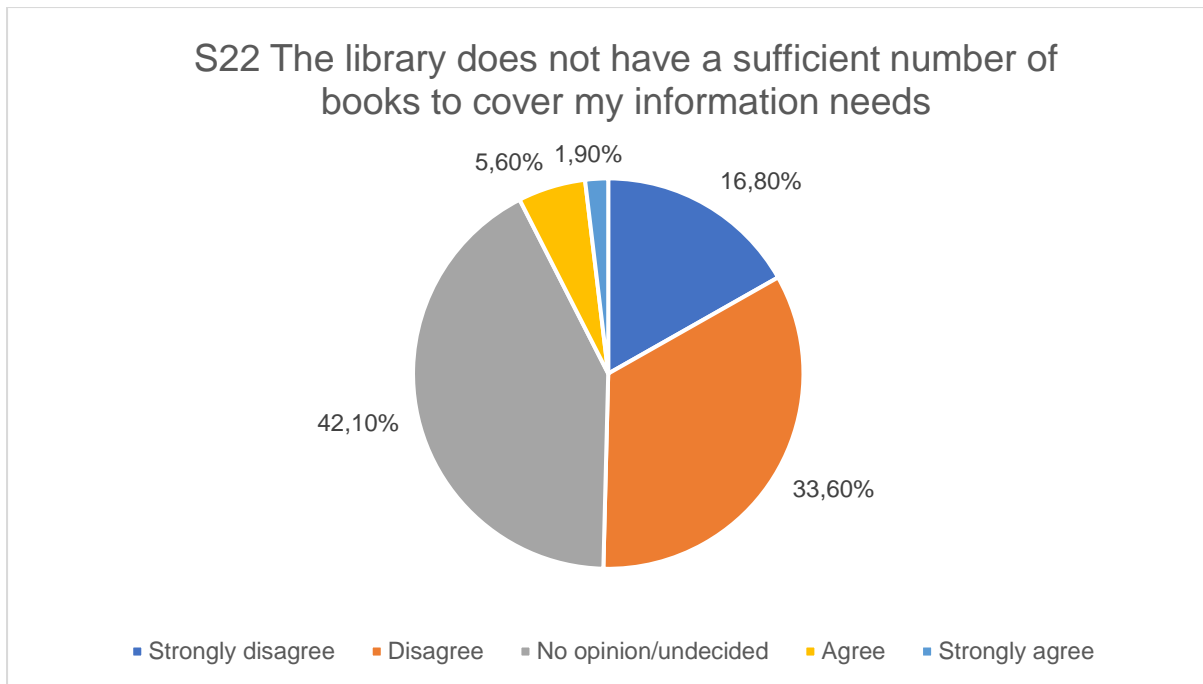


Figure 4.23 - Statement 22

The responses which disagree with Statement 22 far outweigh those that agree as indicated in this breakdown: 7.5% agreed with the statement and 50.4% disagreed with the Statement indicating that the library has a sufficient number of books to cover these students' information needs. A sizeable 42.1% of responses indicated neutrality.

Summary of responses to statements about Library resources and services:

The largest percentage of responses indicated that:

- The library arranges instructional activities (tours, lectures, workshops etc.) on how to use the library.

A large percentage of responses indicated that students were undecided about the following statements:

- I can find the books that I need in the library most of the time.
- The library does not have a sufficient number of books to cover my information needs. I cannot find journal issues on the shelf even though they are indicated by the catalogue as available in the library.
- Reference (user assistance) services in the library are readily available.

- The library does not have a sufficient number of journal titles related to my area of study.

#### 4.2.4 Library Policies:

Four statements addressed library policies and aimed to gather information about the students' understanding of and feelings about library policies. Table 4.5 presents the statements about library policies provided in the questionnaire. This is followed by Figures 4.24 to 4.27 which display the percentages of responses to these statements.

S10	I do not understand the library policies (e.g., photocopying, borrowing of materials, remote access, etc.).
S23	I am not familiar with library policies
S29	I do not understand the circulation (borrowing) policy.
S36	I am satisfied with the opening hours of the library.

Table 4.5. Library Policies Statement

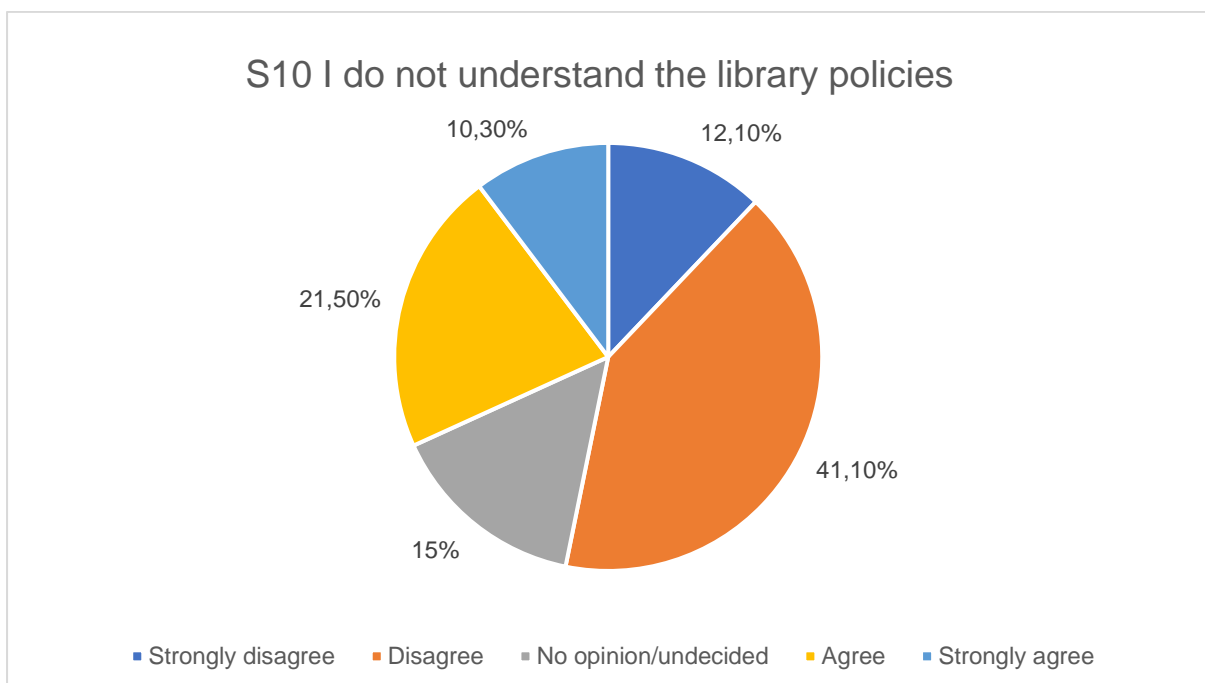


Figure 4.24 - Statement 10

The difference between responses agreeing and disagreeing with Statement 10 is sizeable as indicated in this breakdown: 31.8% agreed with Statement 10 indicating

that these students do not understand library policies and 53.2% disagreed with the statement indicating that these students do understand library policies. A further 15% of responses indicated neutrality.

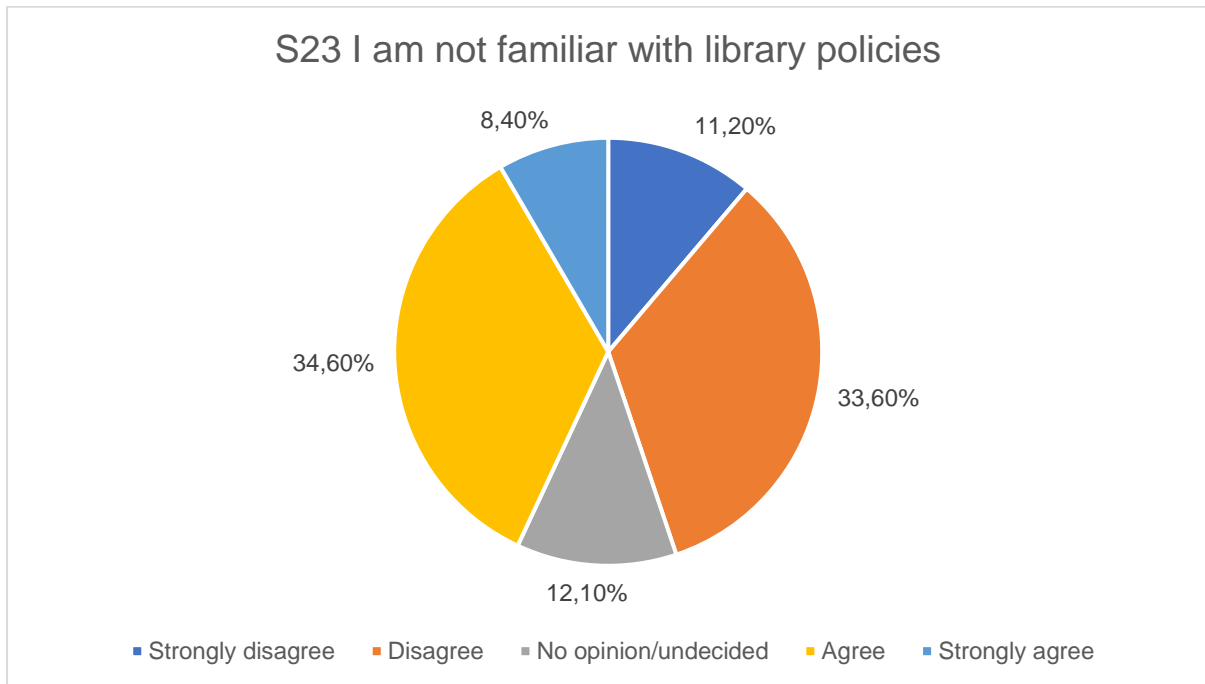


Figure 4.25 - Statement 23

The difference between the agree and disagree responses to Statement 23 is very small as indicated in this breakdown: 43% agreed with Statement 23, while 44.8% disagreed with the statement indicating that these students are familiar with library policies. A further 15% of responses indicated neutrality.

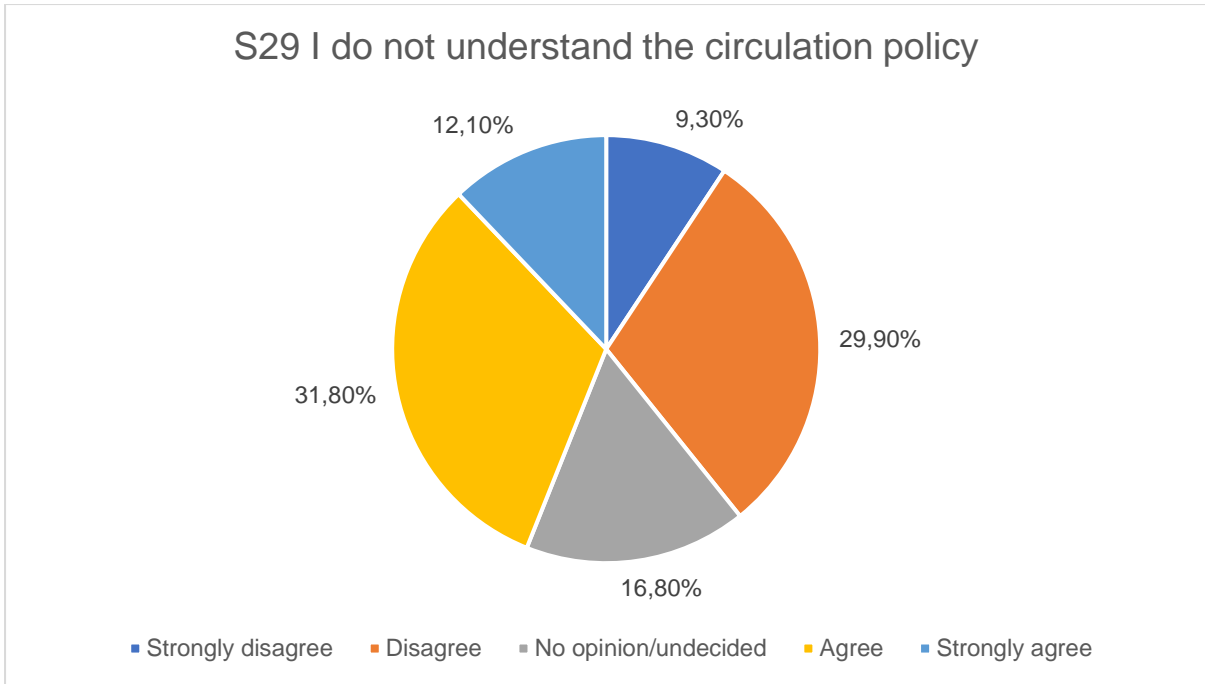


Figure 4.26 - Statement 29

The difference between the agree and disagree responses to Statement 29 is small as indicated in this breakdown: 43.9% agreed with Statement 29 and 39.2% disagreed with the statement indicating that they do understand the circulation policy. A further 16.8% of responses indicated neutrality.

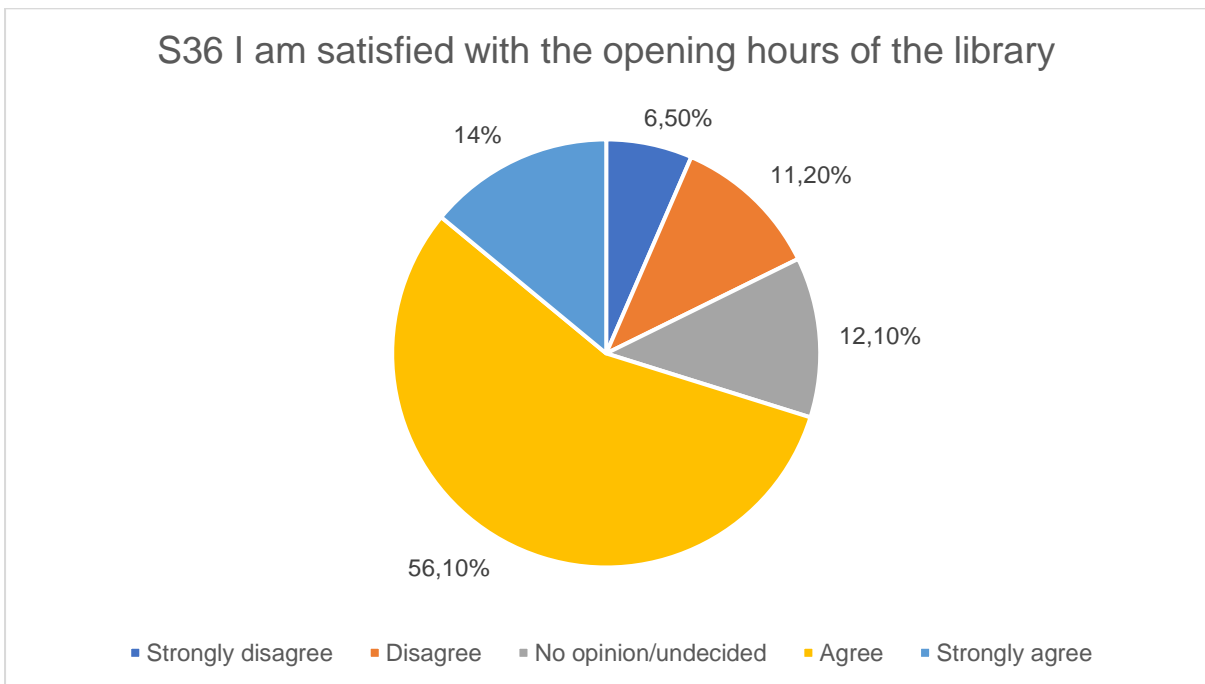


Figure 4.27 - Statement 36

The difference between the agree and disagree responses to Statement 36 is sizeable as indicated in this breakdown: 70.1% agreed with Statement 36 and 17.7% disagreed with the statement indicating that they are dissatisfied with library opening hours. A further 12.1% of responses indicated neutrality.

Summary of responses to statements about Library policies:

The greatest percentage of responses indicated that:

- Students understand the library policies (e.g., photocopying, borrowing of materials, remote access, etc.).
- Students are not familiar with which policies the library has in existence.
- Students do not understand the circulation (borrowing) policy.
- Students are satisfied with the opening hours of the library.

**4.2.5 Information and communications technology (ICTs):**

Seven statements addressed ICTs and aimed to explain students' experience of the Library's ICTs. Table 4.6 presents the statements about library policies provided in the questionnaire. This is followed by Figures 4.28 to 4.34 which display the percentages of responses to the statements as displayed in Table 4.6.

S4	The design of the library's Web site (homepage) is easy to use
S13	I do not know how to search for information in the library's databases
S14	There are enough full-text electronic journals related to my area of study
S26	I do not know how to use the library catalogue (Primo) effectively
S30	The library's Web site (homepage) provides access to information resources that I need
S34	I do not know how to find information using electronic resources
S35	I feel confident using the library computers to find information and to complete my tasks.

Table 4.6 - ICTs Statements

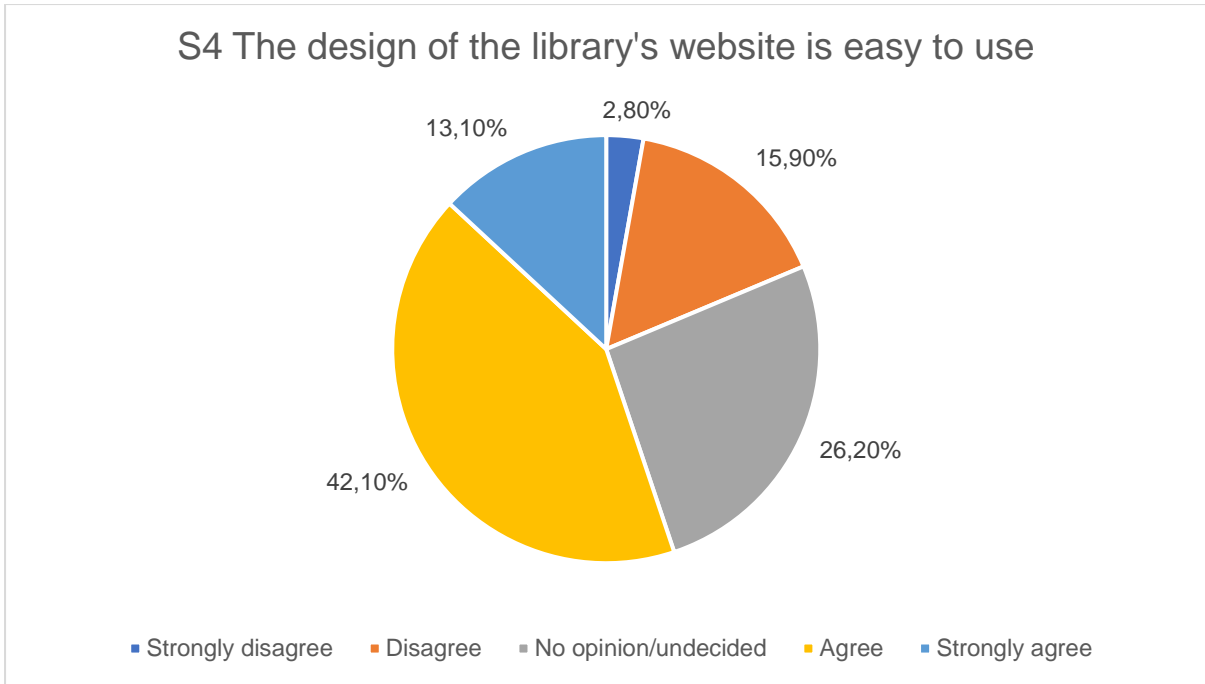


Figure 4.28 - Statement 4

The difference between the agree and disagree responses to Statement 4 is sizeable as indicated in this breakdown: 55.2% of responses agreed with Statement 4 and 18.7% disagreed with the statement indicating that the library website is not easy to use for these students. A further 26.2% of responses indicated neutrality.

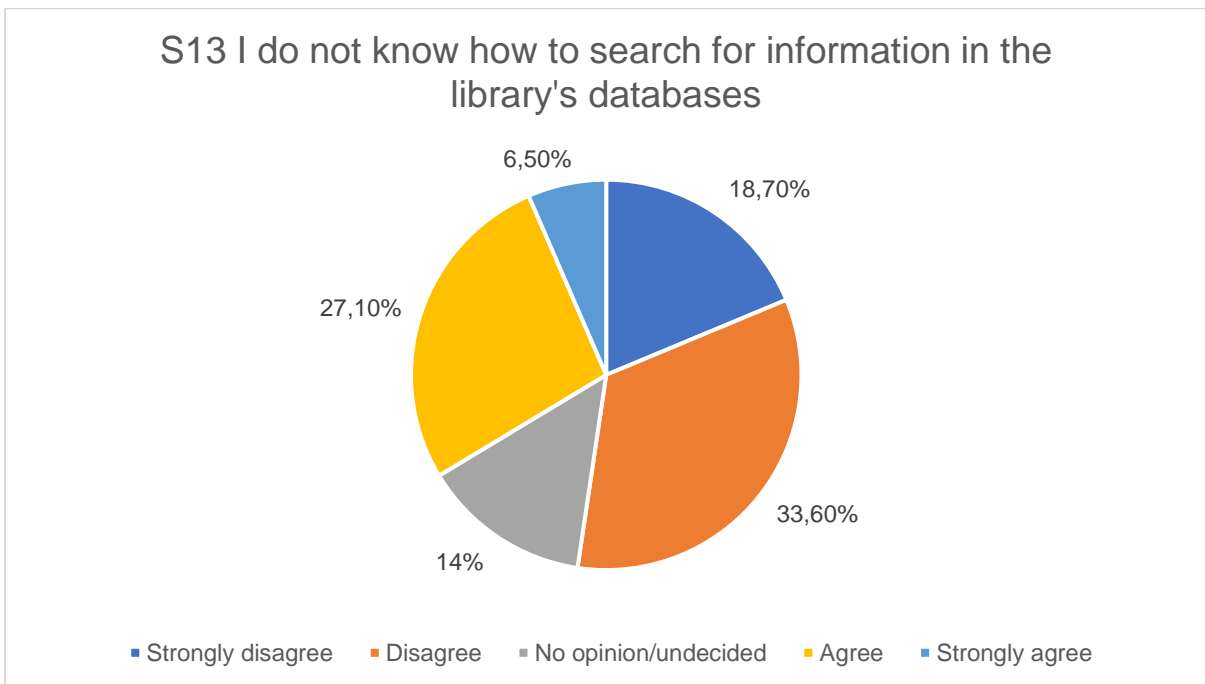


Figure 4.29 - Statement 13

The difference between the agree and disagree responses to Statement 13 is sizeable as indicated in this breakdown: 33.6% of responses agreed with Statement 13 and 52.3% disagreed with the statement indicating that they do know how to search for information in the library's databases. A further 14% of responses indicated neutrality.

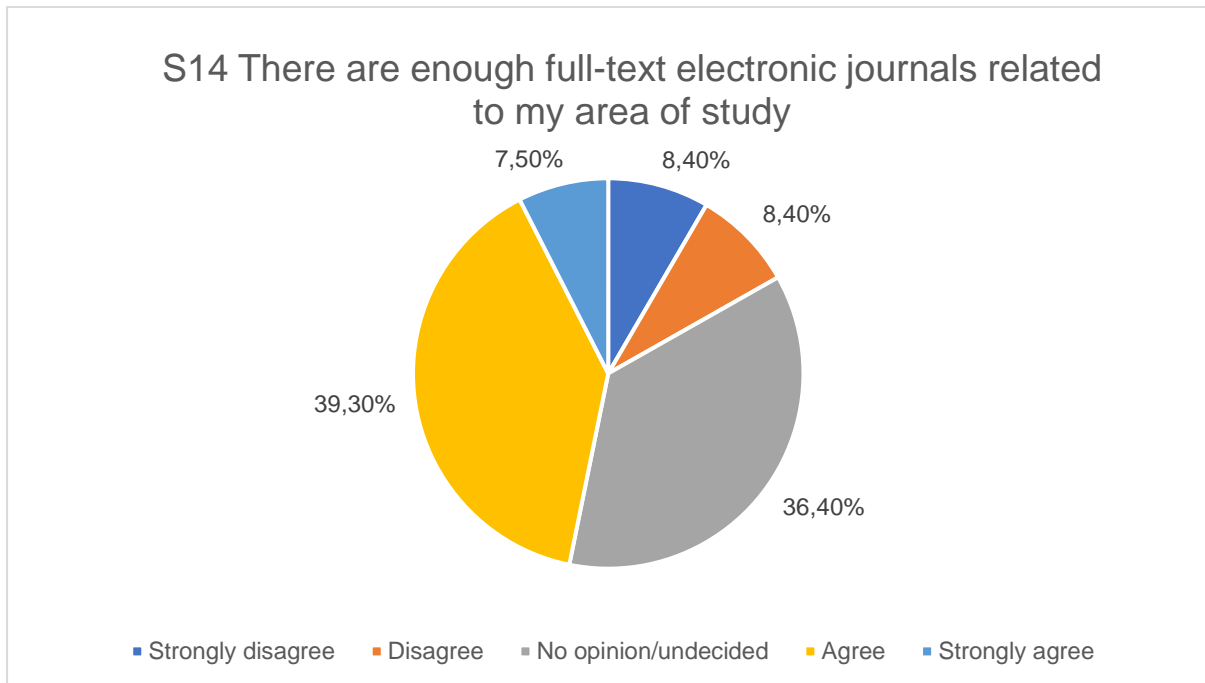


Figure 4.30 - Statement 14

The difference between the agree and disagree responses to Statement 14 is sizeable as indicated in this breakdown: 46.8% of responses agreed with Statement 14 and 16.8% disagreed with the statement indicating that there are not enough full-text journals related to their areas of study. A sizeable number (36.4%) of responses indicated neutrality.

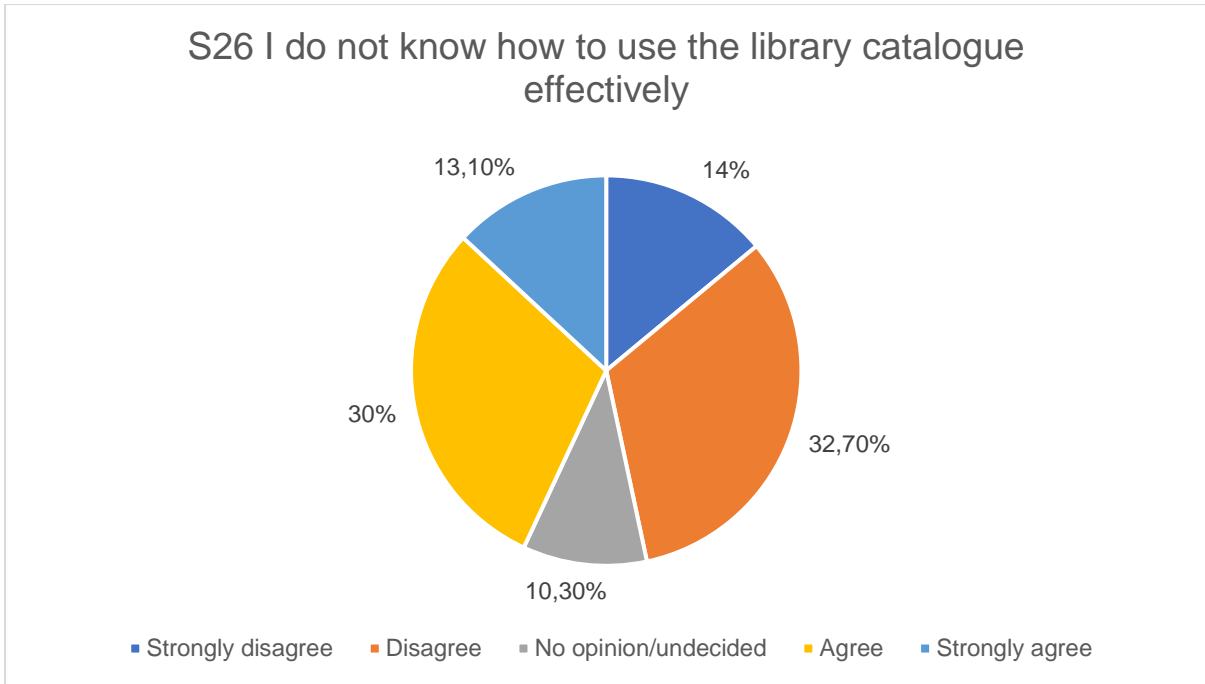


Figure 4.31 - Statement 26

The difference between the agree and disagree responses to Statement 26 is small as indicated in this breakdown: 43.1% of responses agreed with Statement 26 and 46.7% disagreed with the statement indicating that they know how to use the library catalogue effectively. A further 10.3% of responses indicated neutrality.

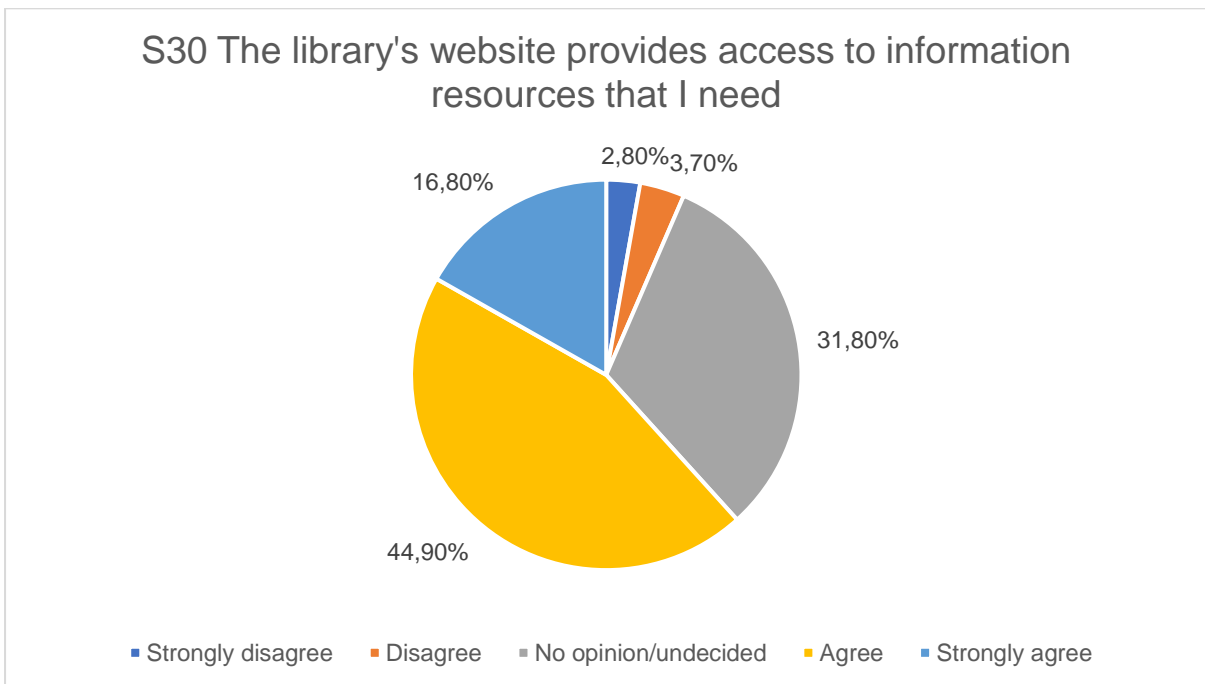


Figure 4.32 - Statement 30

The responses that agreed with Statement 30 far outweigh those that disagreed as indicated in this breakdown: 61.7% of responses agreed with Statement 30 and 6.5% disagreed with the statement indicating that the library website does not provide access to information resources for these students. A sizeable number (31.8%) of responses indicated neutrality.

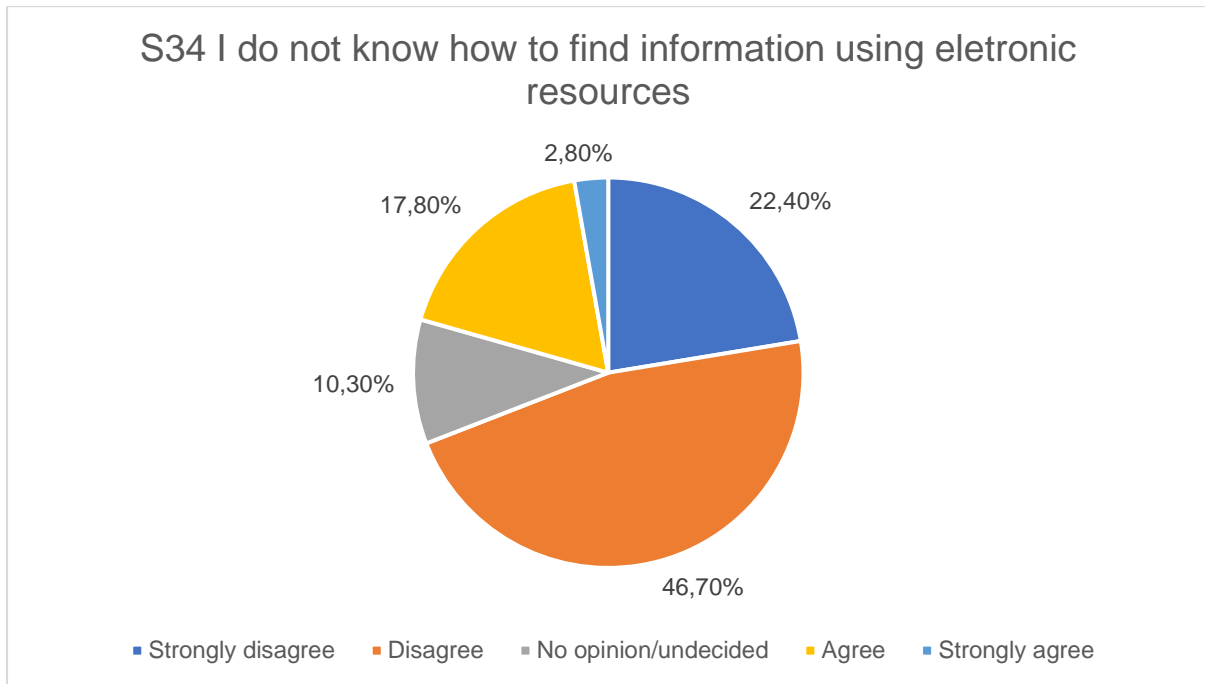


Figure 4.33 - Statement 34

The difference between the agree and disagree responses to Statement 34 is sizeable as indicated in this breakdown: 20.6% of responses agreed with Statement 34 and 69.1% disagreed with the statement indicating that they do know how to find information using electronic resources. A further 10.3 % of responses indicated neutrality.

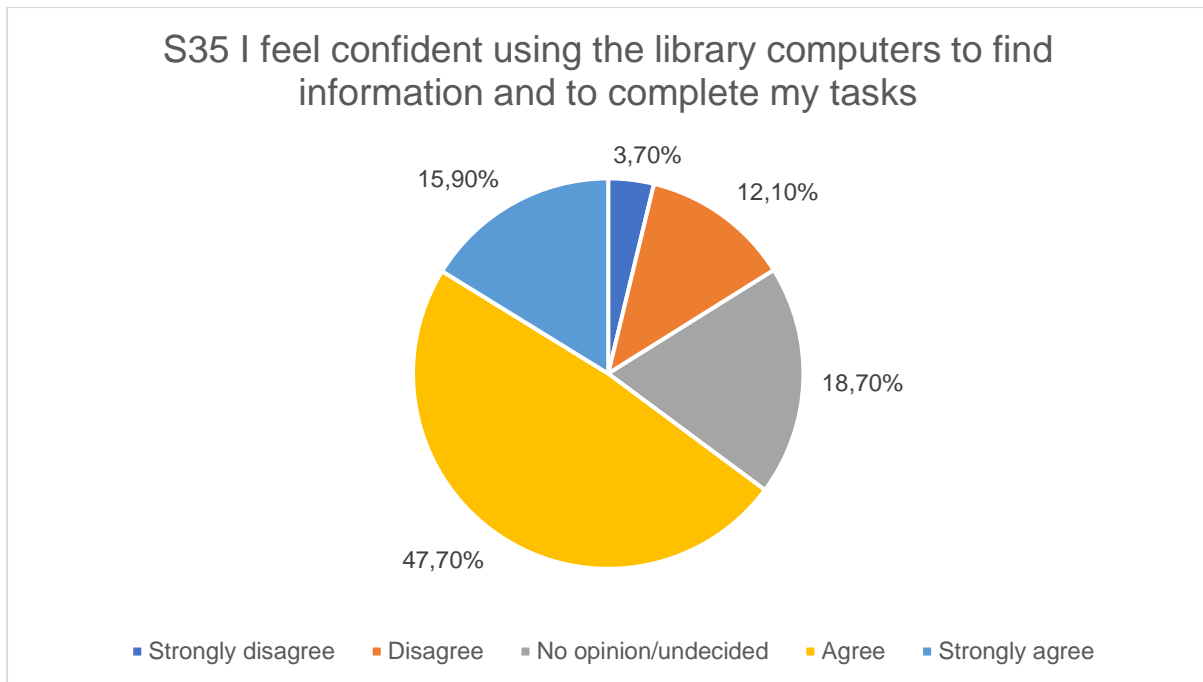


Figure 4.34 - Statement 35

The difference between the agree and disagree responses to Statement 35 is sizeable as indicated in this breakdown: 63.6% of responses agreed with Statement 35 and 15.8% disagreed with the statement indicating that they do not feel confident using library computers. A further 18.7% of responses indicated neutrality.

Summary of responses to statements about Library ICTs:

The greatest percentage of responses indicated that:

- The design of the library's Web site (homepage) is easy to use.
- Students know how to search for information in the library's databases.
- There are enough full-text electronic journals related to students' areas of study.
- Students know how to use the library catalogue (Primo) effectively.
- The library's Web site (homepage) provides access to information resources that students need.
- Students know how to find information using electronic resources.
- Students are confident using the library computers to find information and to complete their tasks.

#### 4.2.6 Information literacy:

Two statements addressed information literacy, aiming to explain students' feelings about approaching information needs. Table 4.7 presents the Statements about information literacy provided in the questionnaire. This is followed by Figures 4.35 to 4.36 which display the percentages of responses to these statements.

S18	I find difficulty selecting the right information sources for my assignments
S32	I do not know how to begin searching for information for my course assignments and research papers

Table 4.7 - Information Literacy Statements

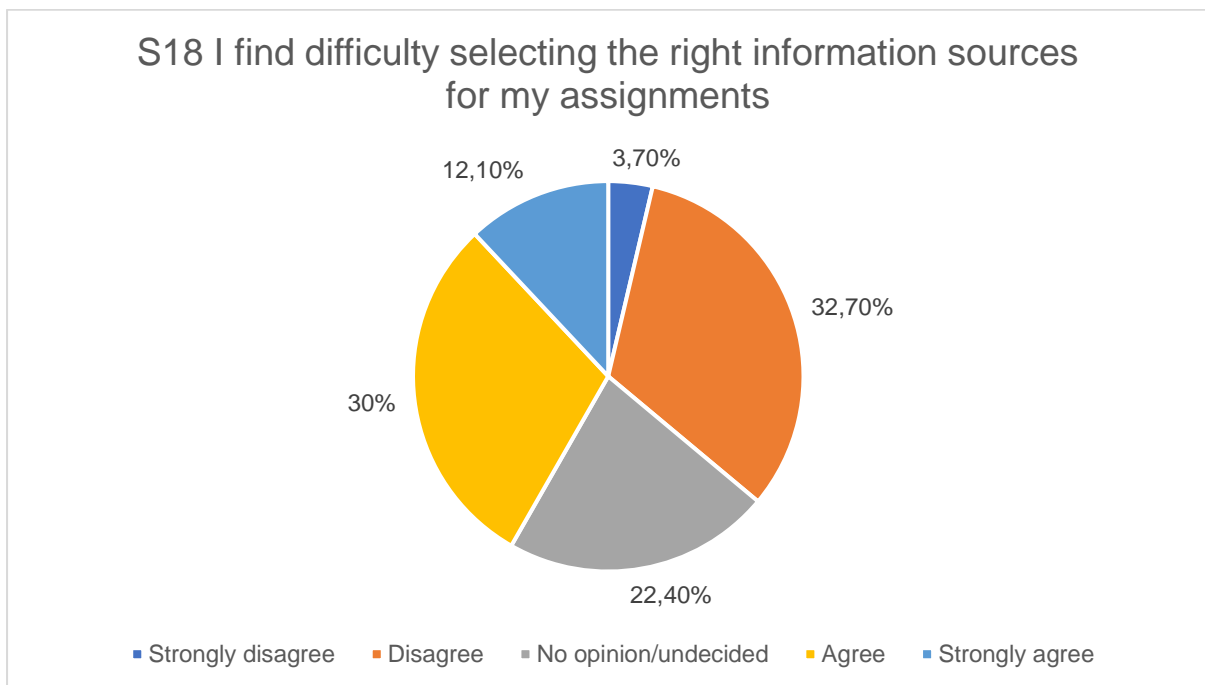


Figure 4.35 - Statement 18

The difference between the agree and disagree responses to Statement 18 is small as indicated in this breakdown: The largest percentage, 42.1%, agreed with Statement 18 indicating that they have difficulty selecting information and a smaller percentage 36.4% disagreed with the statement. A further 22.4% of the responses indicated neutrality.

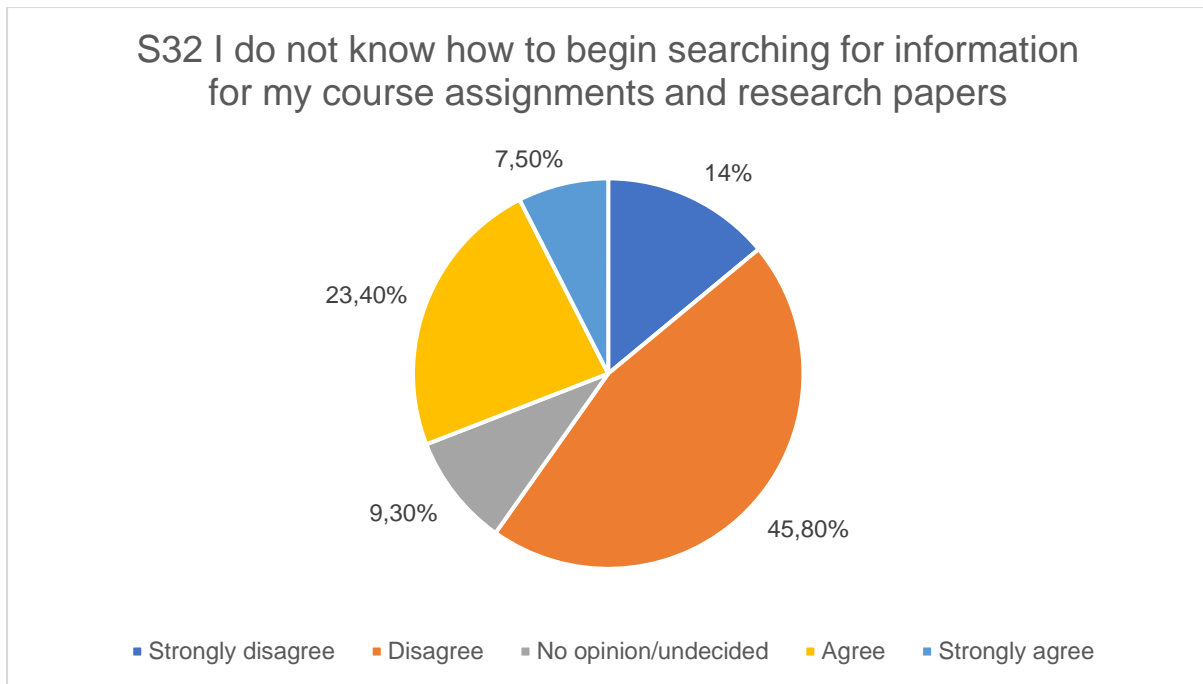


Figure 4.36 - Statement 32

There is a sizeable difference in responses between those who agree and disagree with Statement 32 as indicated in this breakdown: 30.9% agreed with Statement 32 and 59.8% disagreed with the statement indicating that they do know how to begin their information search and 9.3% of the responses indicated neutrality.

Summary of responses to statements about Information literacy:

The greatest percentage of responses indicated that:

- Students experience difficulty selecting the right information sources for their assignments.
- Students know how to begin searching for information for their course assignments and research papers.

**4.3 Levels of Library Anxiety:**

In order to break a pattern of only negatively phrased statements and to encourage participants to think and read the statements carefully, positively phrased statements were included in the original AQAK anxiety scale (Anwar et.al 2011). Sauro & Lewis (2011) suggest that alternating the wording of statements can prevent potential bias in responses. The Library Anxiety Questionnaire, the adapted version of the AQAK scale, included both negatively and positively phrased statements (Appendix A). To

be able to compare and aggregate the individual questions, questions were standardised on the negative scale. The questionnaire used ordinal measurement and so the appropriate statistical measurement was the median – the most frequently occurring response for each question or groups of questions. The most frequently occurring responses to the questions were recorded on a scale of 1 to 5 (Strongly disagree to Strongly agree).

Considering the phrasing of statements, the following scores were used to calculate levels of library anxiety among the undergraduate participants:

- 1- Strongly disagree proxy for Low Anxiety.
- 2- Disagree proxy for Mild Anxiety.
- 3- No opinion/undecided proxy for No Anxiety
- 4- Agree proxy for Moderate Anxiety.
- 5- Strongly agree proxy for Severe Anxiety.

The statements as divided into six themes: Library staff, Library Environment, Library resources and services, Library Policies, ICTs, and Information Literacy reflect different aspects of the library experience which could affect library anxiety according to the literature (see Chapter 2: Section 2.6).

#### **4.3.1 Levels of Library anxiety by Faculty**

The following figures indicate the level of library anxiety among undergraduate students, first as a grand total for the whole cohort of participants, then for each Faculty.

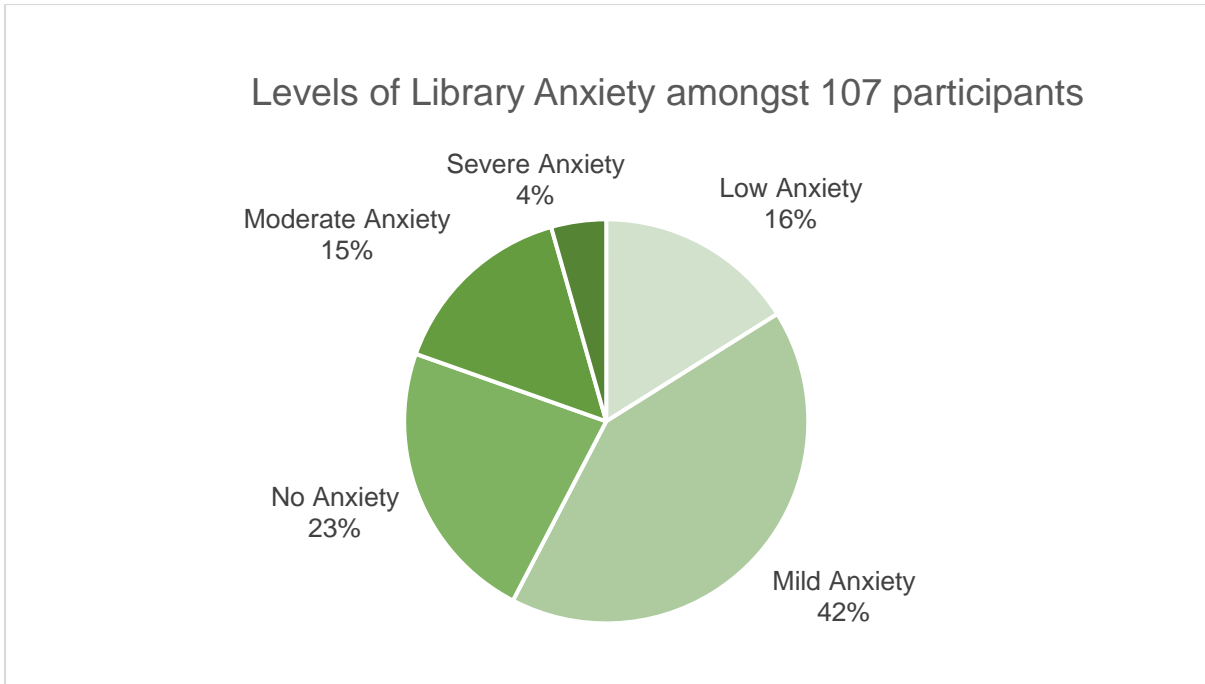


Figure 4.37 - Library Anxiety Levels of 107 Students

The calculation, as explained above (Section 4.3), indicated that more students experience a mild level of library anxiety (42%) than other levels of anxiety. A significant percentage (23%) indicates that students experience No anxiety. The least frequently experienced level of anxiety is severe anxiety.

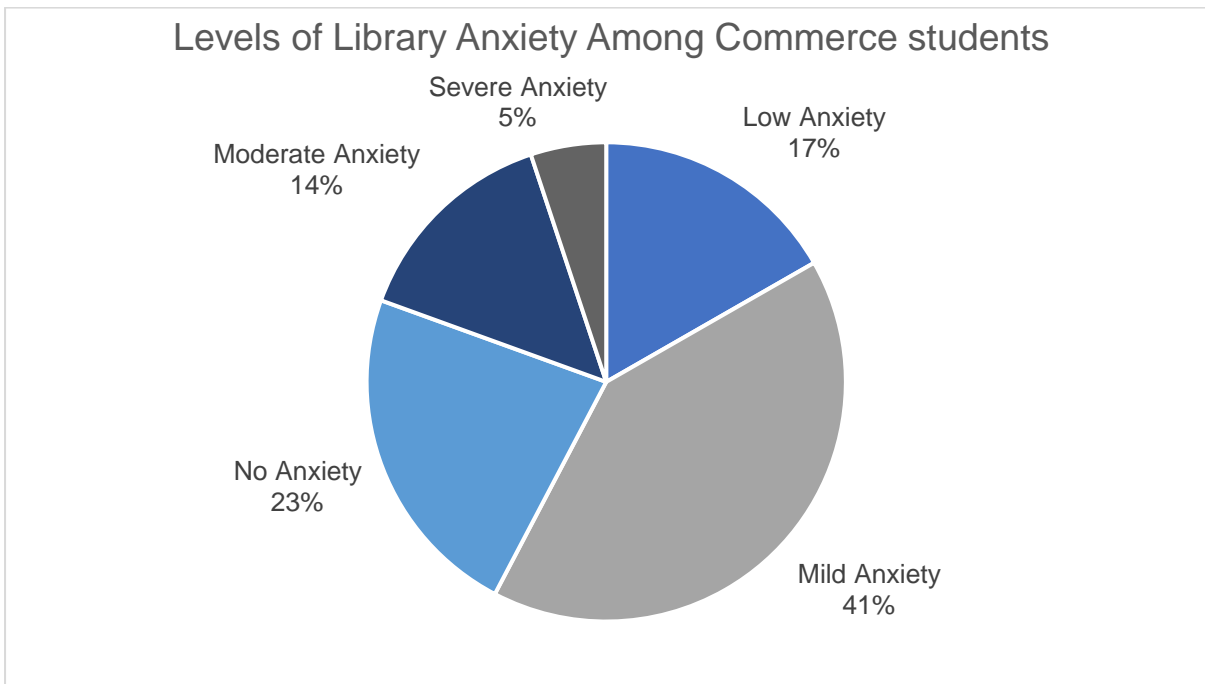


Figure 4.38 - Library Anxiety Levels of Commerce Students

The greatest percentage indicated that that more Commerce students experience a level of mild library anxiety (41%) than other levels of anxiety. A significant percentage (23%) indicates that some students experience No anxiety. The least frequently experienced level of anxiety is severe anxiety.

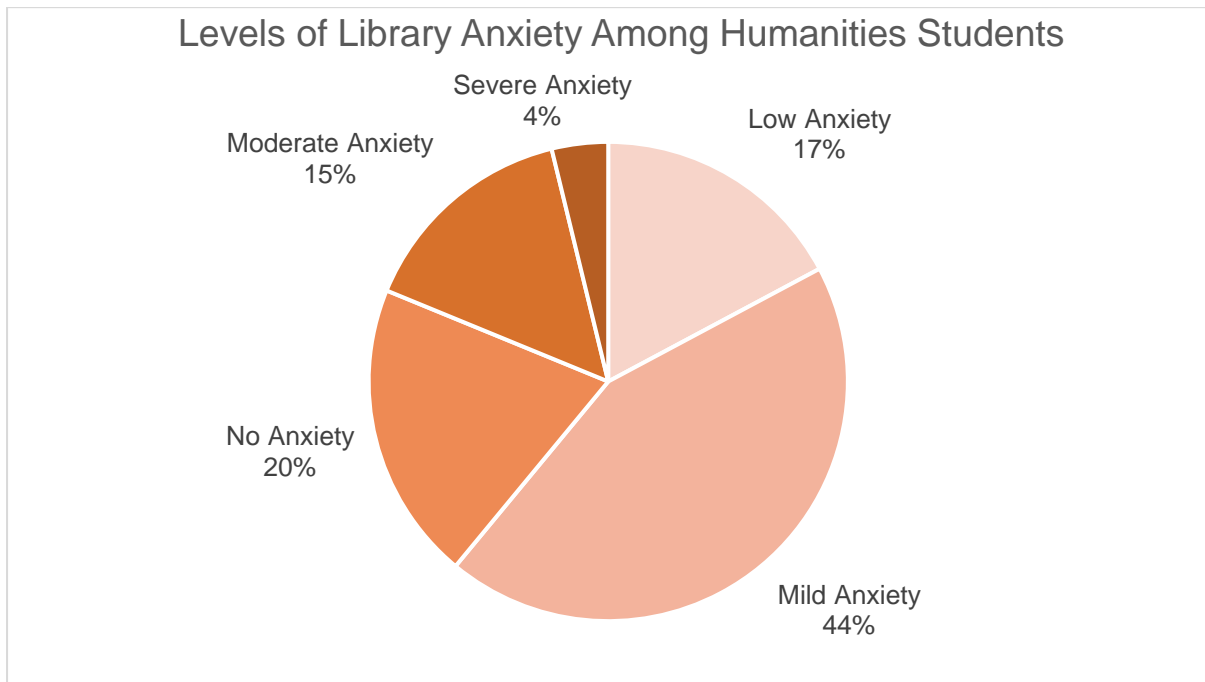


Figure 4.39 - Library Anxiety Levels of Humanities Students

The greatest percentage indicated that that more Humanities students experience a mild level of library anxiety (44%) than other levels of anxiety. A significant percentage (20%) indicates that some students experience No anxiety. The least frequently experienced level of anxiety is severe anxiety.

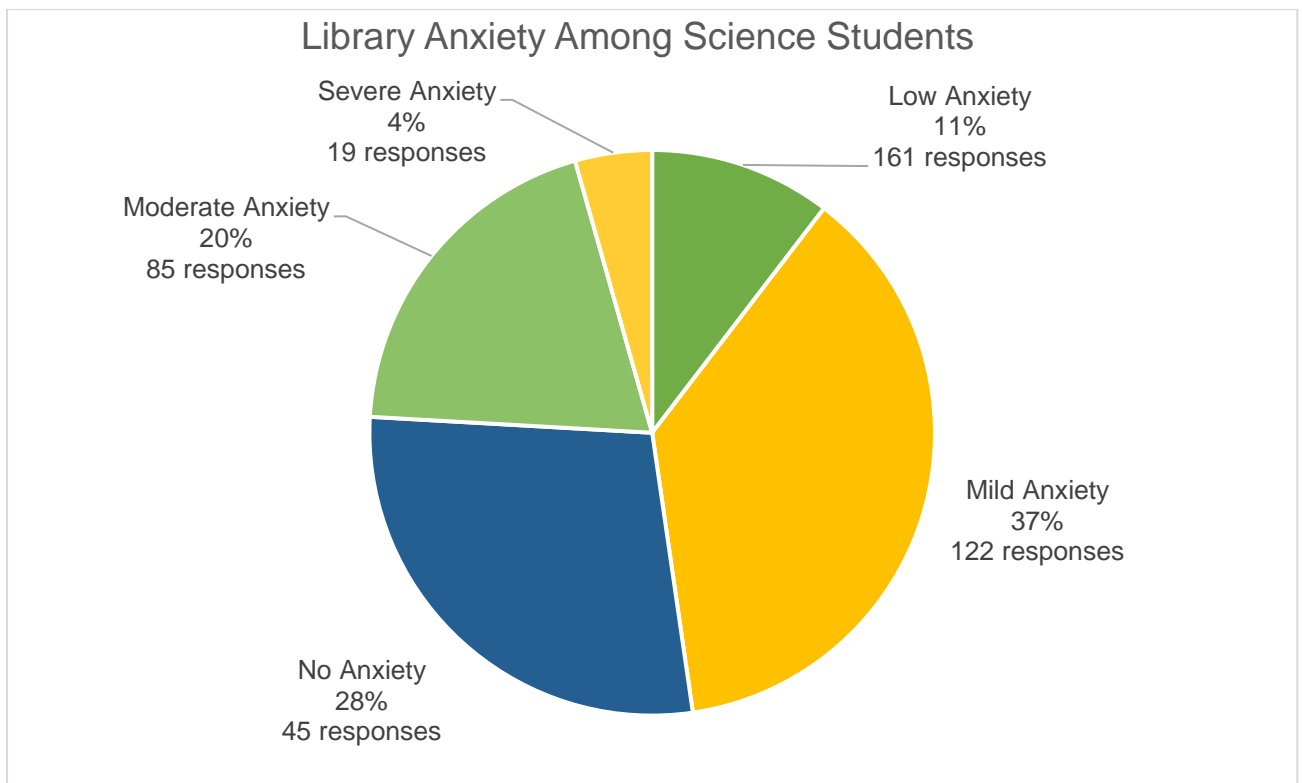


Figure 4.40 - Library Anxiety Levels of Science Students

The greatest percentage indicated that that more Science students experience a level of mild library anxiety than other levels of anxiety. A significant percentage (28%) and number of responses (45) indicates that some students experience No anxiety. The least frequently experienced level of anxiety is severe anxiety.

Levels of library anxiety were investigated further by identifying levels of library anxiety associated with the six factors: Library staff, Library environment, Library resources and services, Library policies, Library ICTs, and Information Literacy. The association between each of the six factors with the five levels of anxiety (Low, Mild, No, Moderate and Severe) was calculated for the entire sample and for each Faculty. The results presenting the relative strengths of each association are shown in Figures 4.41 to 4.44.

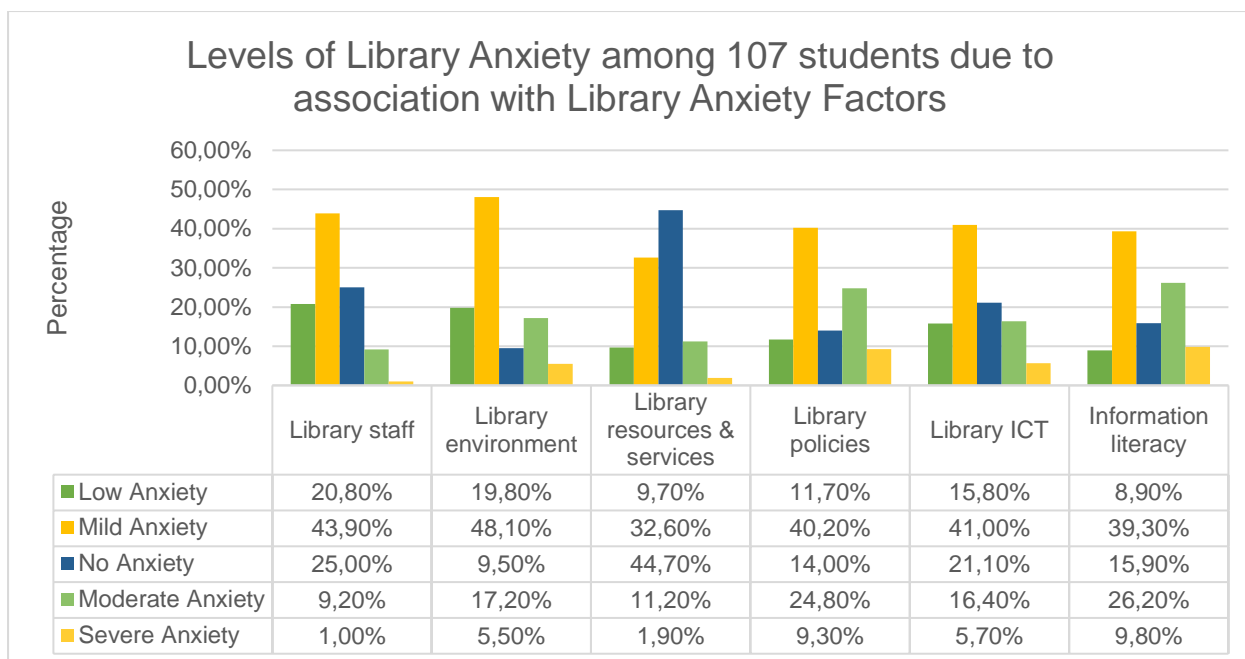


Figure 4.41 - Library Anxiety Levels and Associated Factors for 107 Students

Six dimensions were aggregated in the calculation of library anxiety levels. The calculation of Library Anxiety on this graph shows that the largest percentages of responses indicate that students experience no anxiety, low anxiety, and mild anxiety to a greater degree than other anxiety levels. The greatest percentage (48.1%) of responses indicates that Mild anxiety is associated with the library environment. The strength of the association between levels of anxiety and the dimensions tested is presented in Table 4.8 below, presented from highest to lowest.

Percentage response	Anxiety level	Dimension
48.10%	Mild Anxiety	Library Environment
44.70%	No Anxiety	Library Resources and Services
43.90%	Mild Anxiety	Library Staff
41.10%	Mild Anxiety	Library ICT
40.20%	Mild Anxiety	Library Policies
9.80%	Severe Anxiety	Information Literacy

Table 4.8 - Strength of Association with Dimensions tested: 107 Students

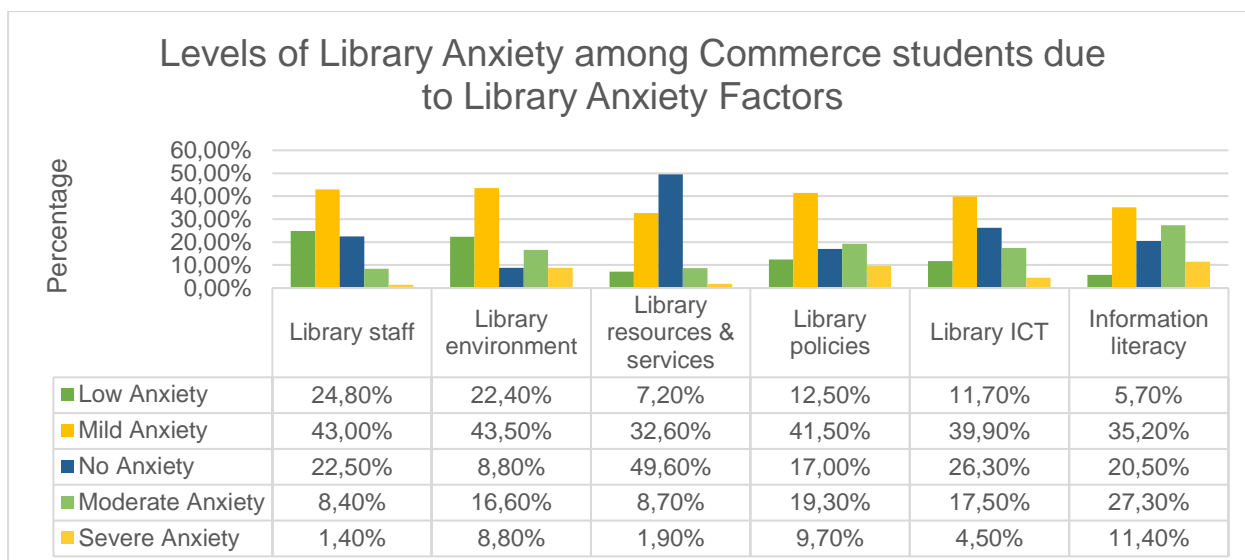


Figure 4.42 - Library Anxiety Levels and Associated Factors for Commerce Students

Six dimensions were aggregated in the calculation of library anxiety levels. The calculation of Library Anxiety presented on this graph shows that Commerce students experience No anxiety or Mild anxiety, to a greater degree than other anxiety levels. The responses indicate that No anxiety (49.6%) was most frequently associated with library resources and services. The strength of the association between levels of anxiety and the dimensions tested is presented in Table 4.9 below, presented from highest to lowest:

Percentage response	Anxiety level	Dimension
49.60%	No Anxiety	Library Resources and Services
43.50%	Mild Anxiety	Library Environment
43.00%	Mild Anxiety	Library Staff
41.50%	Mild Anxiety	Library Policies
11.40%	Severe Anxiety	Information Literacy

Table 4.9 - Strength of Association with Dimensions tested: Commerce Students

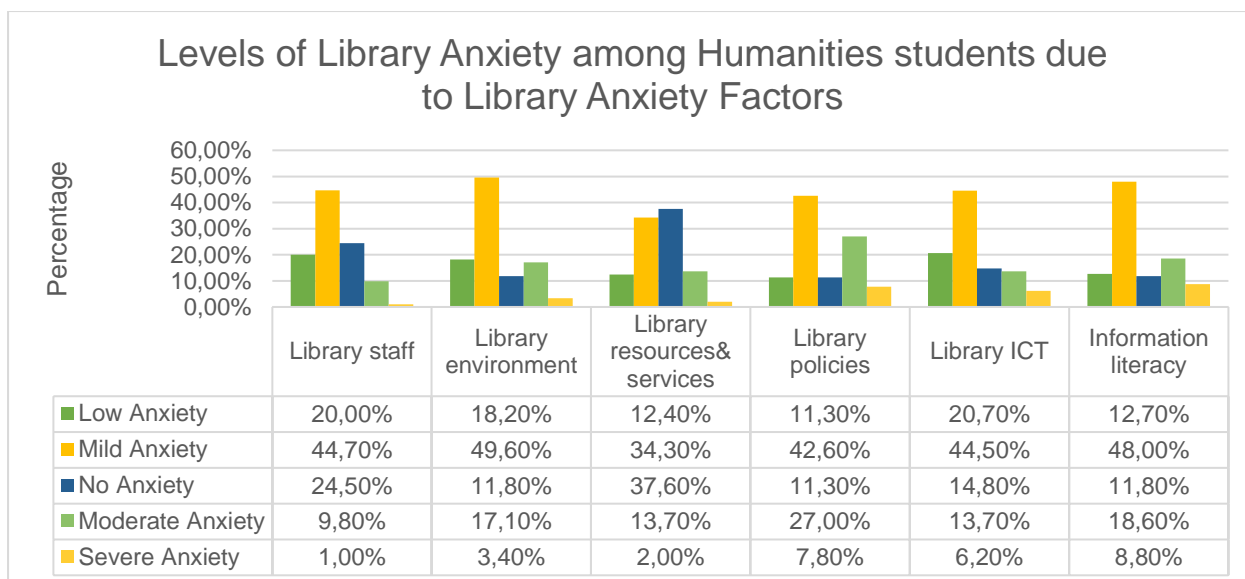


Figure 4.43 - Library Anxiety Levels and Associated Factors for Humanities Students

Six dimensions were aggregated in the calculation of library anxiety levels. The calculation of Library Anxiety presented on this graph shows that Humanities students experience Mild anxiety and No anxiety to a greater degree than other anxiety levels, in association with each of the factors associated with library anxiety. The greatest percentage of responses (49.6%) indicates that Mild anxiety is most frequently associated with the library environment. The strength of the association between levels of anxiety and the dimensions tested is presented in Table 4.10 below, ranging from highest to lowest:

Percentage response	Anxiety level	Dimension
49.60%	Mild Anxiety	Library Environment
48.00%	Mild Anxiety	Information Literacy
44.70%	Mild Anxiety	Library Staff
42.60%	Mild Anxiety	Library Policies
37.60%	No Anxiety	Library Resources and Services

Table 4.10 - Strength of Association with Dimensions tested: Humanities Students

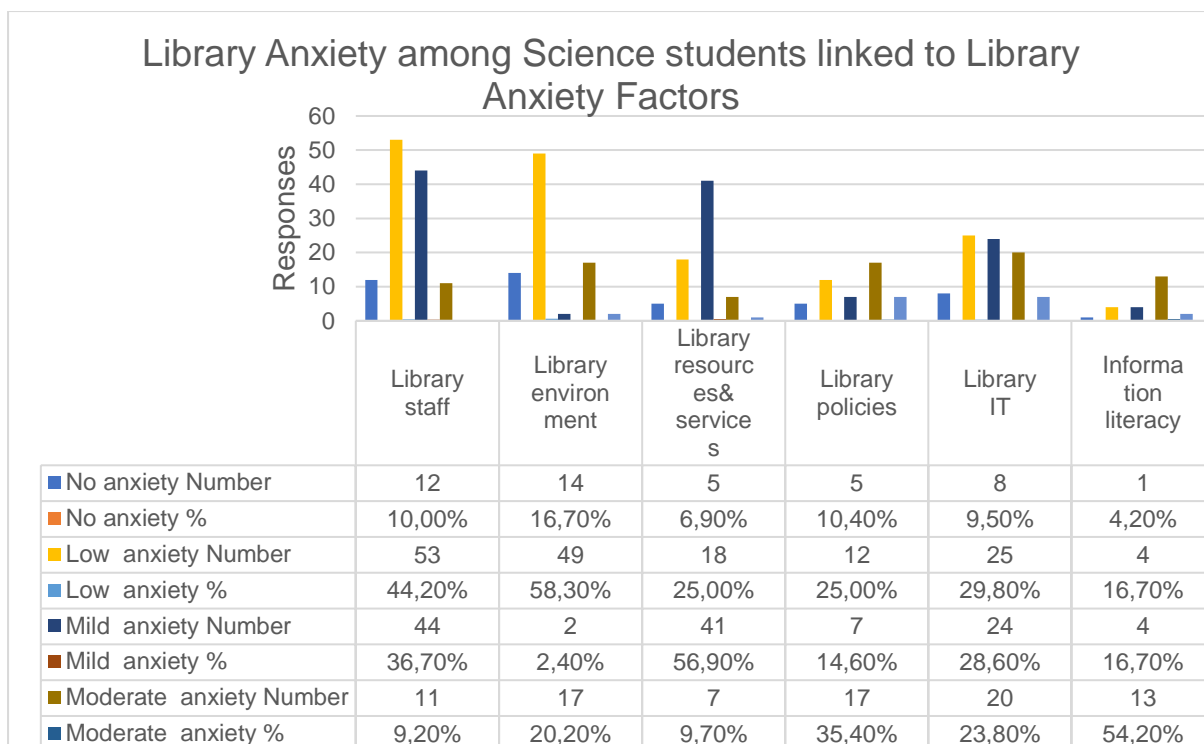


Figure 4.44 - Library Anxiety Levels and Associated Factors for Science Students

Six dimensions were aggregated in the calculation of library anxiety levels. The calculation of Library Anxiety on this graph shows that Science students experienced Mild Anxiety or No Anxiety more frequently than any other levels. These anxiety levels are associated with the Library Environment, Library Staff and Library resources and services. The figures presented under Number of responses in Table 4.11 are larger than the number of total science students due to the following: 12 students responded to 36 statements in the Library Anxiety Questionnaire, for example 12 students responded to 10 questions under the theme Library staff resulting in a possible 120 responses. Fifty-three responses indicated mild anxiety in association with Library staff. The strength of the association between levels of anxiety and the dimensions tested is presented in Table 4.11 below, from highest to lowest:

Number of responses	Anxiety level	Dimension
53	Mild Anxiety	Library Staff
49	Mild Anxiety	Library Environment
44	No Anxiety	Library Staff
41	No Anxiety	Library Resources and Services

7	Severe Anxiety	Library Policies
7	Severe Anxiety	Library ICT

Table 4.11 - Strength of Association with Dimensions tested: Science Students

Summary of library anxiety levels:

The anxiety level experienced to the greatest degree by all undergraduate student participants (Figure 4.37) is mild anxiety. Other anxiety levels were experienced to a lesser degree. Severe anxiety was experienced to the least degree of all levels. No anxiety was experienced by 23% of participants. The level experienced to the greatest degree by Commerce students (Figure 4.38) is mild anxiety and the level experienced to the least degree is severe anxiety. Low and moderate anxiety were experienced to lesser degrees; however, a significant 23% experienced No anxiety. The level experienced to the greatest degree for Humanities (Figure 4.39) and Science students (Figure 4.40) is Mild anxiety, and the level experienced to the least degree is Severe anxiety (4% of Humanities and Science students). Significant percentages indicate that some students experience No Anxiety (20% of Humanities students and 28% of Science students).

<b>Anxiety Levels of 107 undergraduate students</b>		
<b>Level of anxiety</b>	<b>Library anxiety Factors</b>	<b>Percentage of students</b>
Low Anxiety	Library Staff	20.8%
	Library Environment	19.8%
	Library ICT	15.8%
Mild Anxiety	Library Environment	48.1%
	Library Staff	43.9%
	Library ICT	41.0%
No Anxiety	Library Resources and Services	44.7%
	Library Staff	25.0%
	Library ICT	21.1%
Moderate Anxiety	Information Literacy	26.2%
	Library Policies	24.8%
	Library Environment	17.2%
Severe Anxiety	Information Literacy	9.8%
	Library Policies	9.3%
	Library ICT	5.7%

Table 4.12 - Summary of Significant Library Anxiety Levels of 107 Students

Tables 4.12 to 4.15 display the levels experienced, with the relevant most commonly associated anxiety factors for the total cohort, followed by each of the faculties.

Mild Anxiety is associated to the greatest degree with the Library environment and No anxiety is associated to the greatest degree with Library resources and services. Severe Anxiety is associated to the least degree with Information Literacy, Library Policies and Library ICT. Factors most associated with anxiety levels are Library ICT, Library Staff, and the Library Environment. Library Resources and services are associated to the least degree with library anxiety.

<b>Anxiety levels of 44 Commerce Students</b>		
<b>Level of anxiety</b>	<b>Library anxiety Factors</b>	<b>Percentage of students</b>
Low Anxiety	Library Staff	24.8%
	Library Environment	22.4%
	Library Policies	12.5%
Mild Anxiety	Library Environment	43.5%
	Library Staff	43.0%
	Library Policies	41.5%
No Anxiety	Library Resources and services	49.6%
	Library ICT	26.3%
	Library Staff	22.5%
Moderate Anxiety	Information Literacy	27.3%
	Library Policies	19.3%
	Library ICT	17.5%
Severe Anxiety	Information Literacy	11.4%
	Library Policies	9.7%
	Library Environment	8.8%

Table 4.13 - Summary of Library Anxiety Levels of Commerce Students

Among Commerce students, Mild Anxiety is associated to the greatest degree with the Library environment and No anxiety is associated to the greatest degree with Library resources and services. Severe Anxiety is associated in the least degree with Information Literacy, Library Policies and Library Environment. Factors most frequently associated with anxiety levels are Library Policies, Library Staff, and the Library Environment.

<b>Anxiety Levels of 51 Humanities students</b>		
<b>Level of anxiety</b>	<b>Library anxiety Factors</b>	<b>Percentage of students</b>
Low Anxiety	Library ICT	20.7%
	Library Staff	20.0%
	Library Environment	18.2%
Mild Anxiety	Library Environment	49.6%
	Information Literacy	48.0%
	Library Staff	44.7%
No Anxiety	Library resources and services	37.6%
	Library Staff	24.5%
	Library ICT	14.8%
Moderate Anxiety	Library Policies	27.0%
	Information Literacy	18.6%
	Library Environment	17.1%
Severe Anxiety	Information Literacy	8.8%
	Library Policies	7.8%
	Library ICT	6.2%

Table 4.14 - Summary of Significant Library Anxiety Levels of Humanities Students

Among Humanities students, Mild Anxiety is associated to the greatest degree with the Library environment and No anxiety is associated in the greatest degree with Library resources and services. Severe Anxiety is associated to the least degree with Information Literacy, Library Policies and Library ICT. Factors most frequently associated with anxiety levels are Library Staff, Library Environment and Library ICT. Library Resources and services are associated in the least degree with library anxiety.

<b>Anxiety Levels of 12 Science students</b>		
<b>Level of anxiety</b>	<b>Library anxiety Factors</b>	<b>Number of Responses *</b>
Low Anxiety	Library Environment	14
	Library Staff	12
	Library ICT	8
Mild Anxiety	Library Staff	53
	Library Environment	49
	Library ICT	25
No Anxiety	Library Staff	44
	Library Resources and Services	41
	Library ICT	24
Moderate Anxiety	Library ICT	20
	Library Environment	17
	Library Policies	17
Severe Anxiety	Library ICT	7
	Library Policies	7
12 students responding to 36 statements with five responses to each statement.		

Table 4.15 - Summary of Library Anxiety Levels of Science Students

Among Science students, Mild Anxiety is associated in the greatest degree with the Library Staff and No anxiety is associated in the greatest degree with Library Staff. Severe Anxiety is associated in the least degree with Library ICT and Library Policies. Factors most frequently associated with anxiety levels are Library ICT, Library environment and Library Staff. Library Resources and services are associated in the least degree with library anxiety.

#### **4.4 Undergraduate Students Interviews:**

Interviews took place with four undergraduate students in one week. These students had indicated on their completed questionnaire their willingness to being interviewed. Three students were from the Faculty of Humanities and one student was from the Faculty of Commerce participated. The interviews aimed to answer the following questions in order to get a more detailed understanding of the phenomenon of library

anxiety (Q3), and to understand general library behaviour (Q1 and Q2) in an effort to contextualise its incidence:

1. How often do you use the library?
2. What do you use the library for, e.g., borrowing books, studying or research?
3. Can you describe a situation in which you experienced negative feelings when using the academic library?

#### 4.4.1 Interview Findings:

The findings of the interviews are divided into the following main sections: Library usage, Purpose and Library experiences, reflected in this order in Tables 4.16-4.19. This is followed by the relevant table setting out the analysis. In each table, I have identified each student by a number, e.g., Student 1.

Three of the students interviewed use the library on a daily basis, while Student 2 reported minimal library use and library avoidance.

<b>Library Usage</b>			
<b>Category</b>	<b>Finding</b>	<b>Student</b>	<b>Representative Quotations</b>
Library usage	Every day; many times, a day	1, 3, and 4	"I've skipped classes to use the library which I know defeats the point".
	Minimal use	2	"I won't go there alone".

Table 4.16 - Undergraduate Student Library Usage

The students who frequently use the library described using the library for four main purposes: to study, to complete assignments, to borrow books and to socialise with friends.

<b>Purpose</b>			
<b>Category</b>	<b>Finding</b>	<b>Student</b>	<b>Representative Quotations</b>
Purpose	Study space	1 and 4	"I would use the library more for a quiet study session".
	Complete assignments	3	"I also do assignments in the library".
	Borrow Books	2	"I will borrow books - they have a lot of books on the topics I'm interested in".
	Socialising	2	"I have met a lot of people in the library".  "I would just use the library to do assignments or meet up with friends".

Table 4.17 - Purpose of Library Usage

Students described positive experiences with respect to the factors Library resources, Library staff, the Library atmosphere and Library opening hours. They described positive, albeit minimal, interactions with library staff. When Student 1 was asked if she had ever approached a staff member for help, for example, with an essay, she responded that she had never approached a staff member. Her reason for this was that she would rather research a topic independently than wait for a staff member to assist her. Another student stated that she would prefer to access the library's online

content and use Google. Three of the four students attributed negative experiences to the busyness of the library and the difficulty of finding a seat in the library.

<b>Experiences of Undergraduate Students</b>			
<b>Category</b>	<b>Finding</b>	<b>Students</b>	<b>Representative Quotations</b>
Library Staff	Positive Feelings	1,3 and 4	"They're pretty friendly and nice to work with".
	Negative Feelings	2	"They just make it seem like they're gonna be really helpful, but it doesn't kind of ease the anxiety you get when you actually get to the library".
Library environment	Positive Feelings	1,3 and 4	"I love the library. I love the environment".
	Negative feelings	2	"People make so much noise".
Library resources and services	Positive feelings	1,3 and 4	"They have lots of resources not just library books but topics such as the ones I'm interested in, maybe politics or philosophy".
Study space	Negative feelings	1,2 and 3	"The issue of finding space in the library right in the middle of the day gets quite difficult".

Table 4.18 - Undergraduate Student Experiences

#### **4.4.2 Discussion of Library anxiety responses from Student 2:**

Student 2 described her experiences using the Chancellor Oppenheimer Library (COL) as overwhelming and anxiety-provoking. At the beginning of the interview the student stated that she does have library anxiety.

Student 2 attributed her anxiety to the following factors:

1. Unfamiliarity with library rules
2. The size of the library and the number of people using the library.
3. Difficulty selecting the right information for assignments and using the library's website.
4. Uncertainty about how to use the library.

When using the library for the first time the student explained that she would fear that her student card would not give her access to the library; thus, she avoided using the library, visiting it only when a friend could accompany her. The size of the library and difficulty of finding a seat in the library led to the feelings of being overwhelmed and anxious. When asked which factor caused more anxiety, fellow students or the library size, Student 2 noted that the size of the library caused more anxiety. Student 2 noted that a large part of her anxiety was due to unfamiliarity with and uncertainty about how to use the library.

While the responses of Student 2 are included in the above tables, in order to understand her experience these responses were aggregated into a single table, Table 4.19. These responses reflect aspects of library anxiety and show how her experiences are related to dimensions associated with the phenomenon.

<b>Experiences of Student 2</b>		
<b>Category</b>	<b>Finding</b>	<b>Representative Quotations</b>
Description of Library Experience	Overwhelming and Anxiety-Provoking	"I get really anxious and overwhelmed".
Library Anxiety Factors	Unfamiliarity with library rules	"I never go there alone because you have to be quiet all the time".
	Size of the library and population of students using the library	"I get really anxious and overwhelmed by so many people in one space".
	Difficulty selecting information	"Now I don't know which resources to select".
	Uncertainty about how to use the library	"I get worried about, like, when I'm unsure how to do certain things". "In sociology they always say there's no correct answer, they tell us there are many options when writing an essay. I then don't know what resources to select".

Table 4.19 - Experiences of Student 2

Summary of undergraduate student interviews:

The results of the four interviews with undergraduate students indicated that:

1. Most of these students frequently use the academic library.
2. They use the library for varying reasons.
3. They have varying experiences of using the academic library.
4. Not all students have positive experiences using the library. The interview with Student 2 provided important insights into the library anxiety phenomenon as experienced and described by her.

#### 4.5 Librarian Interviews:

The purpose of interviewing UCT librarians was to understand the phenomenon of library anxiety from the librarians' and address the question:

1. What are UCT librarians' views on library anxiety in the UCT library?

To gain the perspective of librarians the following questions were asked:

1. How often do you interact with undergraduate students?
2. For what purpose do students interact with you?
3. Can you describe an interaction with a student who had a negative experience when using the library? This can be a first-hand observation, or a report from a third party.
4. What remedies can you suggest to mitigate the phenomenon of library anxiety?

Five librarians were interviewed, four of whom were Humanities Faculty subject librarians and one, a Science Faculty librarian. The findings of the interviews are divided into three main themes derived from analysis of the interviews: Library anxiety, The Librarian-student interaction, and Library anxiety solutions.

##### 4.5.1 Library Anxiety:

According to the librarians interviewed, the first direct interactions students have with librarians is when subject librarians introduce themselves and address the students in their subject classes. The second point of interaction is when students visit the library on their own. Students interact with library staff in the library building when borrowing books and when consulting the subject librarians for assistance. These interactions with students have led to the consensus among these UCT librarians, that library anxiety does exist, as their comments set out in Table 4.20 show.

<i>Library anxiety does exist; it is always on the periphery</i>
<i>Yes, library anxiety is real - it is real</i>
<i>Yes, it exists everywhere, clever people doubt themselves</i>
<i>Yes, I certainly believe it does exist at UCT, more so with students who are from disadvantaged backgrounds</i>
<i>Yes, we see it in students: the anxiousness</i>

Table 4.20 - Librarian Statements about Library Anxiety

UCT librarians believe that library anxiety does exist and identified several factors that could induce library anxiety in undergraduate students. The following 12 factors were identified by the subject librarians:

1	The open-ended nature of class assignments
2	Self-doubt and unfamiliarity with how to use the library
3	Unpreparedness of students from under-resourced schools who have had limited exposure if any to libraries
4	Fear of failure
5	Unfamiliarity with ICTS and the overwhelming amount of information that is accessed online
6	Lack of computer literacy
7	The size of the library
8	Social anxiety
9	Language differences
10	The large number of resources available leading to students being overwhelmed
11	Lack of information literacy skills
12	Library rules

Table 4.21 - Causes of Library Anxiety

The 12 factors were classified into four main themes: Personal Factors, Unpreparedness of undergraduate students, Library Size and Library rules and policies. This is followed by a commentary on each of the factors, in the order presented in Table 4.22.

<b>Causes of Library Anxiety</b>		
<b>Factors</b>	<b>Findings</b>	<b>Representative Quotations</b>
Personal Factors	Fear of failing and self-doubt.	“They fear failing”. “Students walk in with no idea what to do or how to do it”. “Clever people doubt themselves”.
	Language barriers	“Students come to university where everything is written in English, but they speak another language at home”.
	Social anxiety	“The anxiety can extend to the overall university experience”.
Unpreparedness of undergraduate students	Disadvantaged background of students	“In South Africa we have social disparity, students from different backgrounds transition into university”.
	Lack of information literacy and computer literacy	“Students especially from underprivileged or poorer backgrounds don’t have that information or computer/digital literacy”.
The size of the library	Overwhelming library size	“The size of the library can be off-putting, there are many levels to it”.
	First exposure to a library	“The UCT library could be the first library a student has ever set foot in, and this could become overwhelming - ‘the unknown’”.
Library rules and policies	Library rules and policies	“Library rules definitely come into play later on”.

Table 4.22 - Librarian Statements About Library Anxiety Causes

Librarians noted personal factors that could induce anxiety in undergraduate students. Students could experience a fear of failure, self-doubt, pre-existing social anxiety, and language barriers.

The unpreparedness of students was a factor that emerged in each interview with the librarians. Librarians noted that students from disadvantaged backgrounds or under-resourced schools with little, if any, access to libraries could experience anxiety when using the university library. The lack of preparedness of students could also be

attributed to their lack of computer or information literacy. Students who had not used computers prior to attending university could find the online information environment very difficult. A lack of information literacy could prove difficult for students when class assignments are often open-ended and the large number of resources available could cause students to become overwhelmed.

Librarians indicated that the size and complexity of the library played a role in causing anxiety: the word 'overwhelming' was used by many librarians to describe the size of the library. The Chancellor Oppenheimer Library (COL) is a very large space that could prove overwhelming for students who are experiencing the library for the first time: The library policies and rules were also a potential contributing factor to library anxiety according to the librarians.

The consensus of academic librarians from the COL library is that library anxiety is a phenomenon that exists at UCT, as in many other academic libraries. The librarians explained that there are many factors that can induce library anxiety; these factors were identified as a result of their years of experience with and observations of students in their workday.

#### **4.5.2 Library anxiety solutions:**

The consensus among the librarians was that the library has already put in place changes that make the student experience easier and in turn could ease library anxiety. In addition, they identified personal changes they have made to improve their interactions with students and reduce the possibility of library anxiety.

The librarians noted the following strategies used to mitigate feelings of anxiety:

1	Meeting library students at their level, appearing approachable.
2	Addressing language barriers by referring to multilingual colleagues
3	Diverse staff who are of different ages and speak different languages.
4	Staff awareness of students and sensitivity
5	Library programmes that have become simplified for students.
6	Addressing gender sensitive subjects
7	The outward facing library and being visible to students.
8	Targeting disadvantaged students to help them ensure that the students get training on how to use the library.
9	Peer assistants

Table 4.23 - Librarian Solutions to Library Anxiety

The nine changes/choices made by the librarians and the library were divided into three themes: Addressing the diversity of students, Awareness of the student experiences and Library services.

<b>Library Anxiety Solutions</b>		
<b>Factors</b>	<b>Identified Solutions</b>	<b>Representative Quotations</b>
Diversity of students	Awareness of student body	"We need to be aware that the student body is changing".
	Language barriers	"Librarians must be aware of language barriers and utilise colleagues who speak different languages".
	Diverse staff	"We have a diverse staff who speak different languages, some of whom are closer to the age of the students". "Librarians who speak different languages assist in avoiding miscommunication or misunderstanding".
Awareness of student experiences	Appearing approachable	"We need to take the approach like a meerkat where we are constantly on the alert and observing students".
	Sensitivity to students	"You try to be sensitive to students and pick up on signals".
	Meeting students at their level	"It is important to meet students at their level and personalise services where possible. It is important to meet undergraduates at the beginning of their studies".
	Focus on disadvantaged students	"I want to target students from disadvantaged backgrounds to ensure that they meet me and receive training on different aspects of how to use the library".
Library Services	Changes to library website	"The library website was simplified to make it easier for students to use".
	Library visibility	"The outward facing library is important, and the library has a stronger presence on Vula in the form of announcements on the log-in page".
	Library peer assistants	"The library has peer assistants in the form of student assistants and the library buddies so students can approach their peers if they find library staff intimidating".

Table 4.24 - Librarian Statements About Library Anxiety Solutions

The interviews with librarians addressed the potential difficulties during student-librarian interactions. Librarians described ways in which they bridge potential difficulties of language barriers. In addition to language barriers one librarian described a problem arising when a student required assistance with a gender sensitive assignment topic. The librarian required a colleague to take her place to prevent further difficulties in the librarian-student interaction. Librarians stated that

UCT librarians are aware that students can encounter difficulties when using the academic library. They noted the importance of being aware of students on the 'library floor', appearing approachable and displaying sensitivity to students. It is important to meet students at their level and personalise services where possible. It is important to meet undergraduates at the beginning of their studies. One librarian noted her specific focus on students from disadvantaged backgrounds to make their experiences with the library easier.

The library has made changes aimed at making the library experience easier to use; most notably the changes made to the library website. Librarians noted the increased visibility of the library on platforms used by students. Librarians spoke about the employment of students as library buddies who walk around the library and student assistants who work at the library circulation desk. One librarian noted that this could ease anxiety in students who might be afraid to ask assistance of older library staff.

Librarians have developed the ability to spot students who might appear uncertain or lost and have developed a way in which to elicit the necessary information from students. In email interactions, librarians have become able to determine from the messages whether students are anxious. Librarians have attempted to be sensitive to students and pick up on signals.

#### **4.6 Conclusion:**

Chapter 4 presented the findings of the Library Anxiety Questionnaire and interviews with undergraduate students from the Faculties of Commerce, Humanities and Science as well as librarians from the Humanities and Science faculties. Chapter 5 will discuss the findings presented in Chapter 4 including a section which attempts to account for the frequency of No opinion/Undecided responses. Chapter 5 will also provide a conclusion as well as recommendations.

## **CHAPTER 5 - CONCLUSION**

### **5.1 Introduction:**

Chapter Five discusses the main findings of the Library Anxiety Questionnaire and interviews with undergraduate students and academic librarians as presented in Chapter Four. In addition to this discussion, there are sections on a) the conduct of the investigation during a period of Covid-19 restrictions (Section 5.2) and b) comments on and attempts to interpret the high frequency of responses to the category No opinion/Undecided (Section 5.4). The general discussion of findings (Section 5.3) is structured around the Library Anxiety Theory (Mellon, 1986) which underpinned this research and guided the following critical questions which this research aimed to answer:

1. How do undergraduate students experience the COL library?
2. Do current UCT undergraduate students experience library anxiety and how does it manifest?
3. What are UCT librarians' views on library anxiety in the UCT library?
4. What remedies could be used to mitigate the phenomenon of Library Anxiety?

Recommendations based on the discussion of findings follow the discussion and interpretation of the results.

### **5.2 Effect of Covid-19 on data collection:**

The Covid-19 pandemic had significant effects on the distribution of Library Anxiety Questionnaire as well as the ability to conduct interviews with undergraduate students and academic librarians. These effects were identified as the following:

1. Due to the closure of the COL and other UCT libraries during the pandemic, students' responses to the questionnaire and interviews would have relied on experiences prior to library closures. These experiences were from years prior to 2020.
2. The number of responses to the Library Anxiety Questionnaire were fewer than intended. Access to students was gained via online and thus was more limited than the likely outcome of distribution of the

- questionnaire in the library itself. Students who were approached in person to participate, are likely to have been more willing to participate.
3. The number of students willing to be interviewed was also limited by the online nature of communication. Communication was limited to email invitations and interviews were done via telephone calls. Had students been approached in person, the willingness of students to be interviewed is likely to have been greater.

### **5.3 Main Findings:**

The main findings are divided into three sections: Undergraduate Student Experiences, Library Anxiety at UCT, and Library Anxiety Solutions.

#### **5.3.1 Library Staff:**

Research suggests that library staff play a significant role in the library experience of undergraduate students. Library anxiety can be attributed to negative perceptions towards library staff (Abusin & Zainab, 2010:61). Negative perceptions of librarians as well as unmet expectations of staff to fulfil specific roles such as being helpful or patient when interacting with students, could lead students to experience stress and anxiety (Abusin & Zainab, 2010:67-68).

The results of the Library Anxiety Questionnaire suggest that students' interactions with library staff have an effect on the experiences of undergraduate students. Students expressed mixed feelings towards Library staff. The greatest percentage of respondents reported positive experiences when interacting with library staff. Respondents found staff to be approachable and helpful to students in aiding information searches. Smaller percentages of respondents, however, had negative perceptions of library staff finding library staff to be unfriendly and unapproachable. Furthermore, smaller percentages of respondents felt that librarians do not care about students' needs noting that they were unhelpful in guiding students to use library databases and to conduct information searches.

Negative experiences with or perceptions of Library staff could mean that students develop fear or apprehension of seeking assistance from library staff (Onwuegbuzie,

1997:15). It is logical to conclude that UCT students who had negative perceptions of towards library staff could develop a fear of approaching them.

### **5.3.2 Library Environment:**

Research suggests that the library environment which includes factors such as the layout of a library, cleanliness, noise levels and seating space can have an effect on the experiences of undergraduate students and perceptions of the library environment (Abusin & Zainab, 2010:61-65). A lack of cleanliness and space as well as loud noise levels could lead to perceptions of the library as unappealing (Abusin & Zainab, 2010:62). Responses to the Library Anxiety Questionnaire suggest that the COL library environment plays a role in the way in which the library is used, how often it is frequented and how comfortable students feel in and when using the library.

There were mixed responses to questions about the library environment. Some students found that the library does not have enough study space while others were able to find a place to study. Some respondents were encouraged to use the library due to factors such as quiet study spaces, the library temperature and décor.

Some participants reported feeling discouraged to use the library due a number of environmental factors. These students noted their inability to find a comfortable, quiet place to study. Discomfort was experienced by these students as a result of the décor and temperature of the library. This perception of the library could lead to avoidance of the library (Abusin & Zainab, 2010:62).

### **5.3.3 Library resources and services:**

One of the most significant aspects of the library could be argued to be the resources and services of the library. These could factor heavily in the purpose for using the library. Inadequate provision of relevant, up to date resources such as books could lead to students becoming distressed and developing negative perceptions of the library resources and services (Abusin & Zainab, 2010:70-71).

There were mixed responses to the questions about Library resources and services. High percentages of respondents identified that the library provides instructional

activities, that the library provides them with enough journal titles and books and that reference assistance is readily available. Books were also readily accessible to these students. Smaller percentages of respondents indicated a negative opinion stating that they could not find journal issues on the library shelves. Some respondents indicated that library resources were insufficient in number, including books and journals. A small percentage of respondents also noted their inability to find books on library shelves. Instructional activities and reference services were also noted as lacking by these students.

### **5.3.4 Library Policies**

Library policies such as operating hours, loan restriction or limits to loaning reference materials could mean restricted library use and difficulty using the library (Abusin & Zainab, 2010:63,70).

Library policies at the COL include library operating hours, circulation policies and library rules. The students again indicated mixed opinions on this issue. Some students described not understanding circulation policies although they claimed to understand other general library policies. Some students also noted unfamiliarity with library policies. This could suggest that these students understand some general policies but are not aware of all the library policies. The greatest percentage of respondents also noted that they were satisfied with library opening hours. Some students did not understand general library policies or circulation policies and were not satisfied with the library opening hours.

### **5.3.5 ICTS**

ICTs play an important role in the academic library in the storing and distributing of information and delivering library services (Krubu & Osawaru, 2010:3-4). Furthermore, ICTs have aided in the creation of online catalogues and the provision of access to digital information (Kumar, 2009:105).

In the current academic library environment at UCT ICTs play a significant role in the functioning of the library and in the day-to-day course work of students. In the COL students can access information on the library website, access databases and electronic materials and use library computers to complete coursework. Most students

indicated positive experiences in association with ICTS. These students found the library website easy to use, thus providing access to information. The library catalogue is easy to use, electronic resources are sufficient in number, and they are able to use electronic resources to gather information and feel comfortable using library ICTS.

A smaller percentage of respondents indicated that they had negative experiences in relation to ICTS, reporting that the library website was difficult to navigate, and information not easily accessed via the library website. They did not know how to use the library's catalogue and felt that there are not enough electronic resources available. Lastly some students did not know how to find information from electronic resources and did not feel confident using library ICTS.

#### **5.3.6 Information Literacy:**

The literature shows that students in South Africa entering higher education are from varying backgrounds and with different levels of literacy (Naidoo & Raju, 2012:35). Students attending UCT are likely to exhibit the same characteristics.

Most responses to Statement 18 and Statement 23 (dealing with information literacy) indicated that the students did not find difficulty beginning an information search and did not find difficulty selecting the appropriate information. A much smaller percentage of respondents indicated that they did not know how to begin an information search and experienced difficulty selecting the appropriate information to meet their need, both essential components of information literacy.

#### **5.4 Responses of No Opinion/Undecided:**

A surprising finding of the responses to the Library Anxiety Questionnaire was the high number of respondents selecting the category No Opinion/Undecided in response to several statements under the themes of Library staff, Library environment, Library resources and services, Library policies, ICTs, and Information literacy.

The midpoint response (No Opinion/Undecided) in any scale or questionnaire could represent the following opinions:

- The respondent is undecided about a statement.
- The respondent has no opinion about a statement.

- The respondent feels neutral towards a statement (Velez, & Ashworth, 2007).

The literature points out that it is difficult to determine accurately why students respond No Opinion/Undecided: suggesting however, possible reasons for this choice (Velez, & Ashworth, 2007:70). Students might choose this response if they do not fully understand the statement. Furthermore, when confronted with a statement that is complex, students might choose the No Opinion/Undecided response to avoid the effort of thinking deeply about a response (Velez & Ashworth, 2007:70).

The frequency of the No Opinion/Undecided responses to the 36 statements are presented in Figures 5.1 and Figure 5.2, divided into two sections for easier analysis. Figure 5.1 presents the frequency of the No Opinion/Undecided response for Statements 1-18, while Figure 5.2 presents the frequency of the No Opinion/Undecided response to Statements 19-36.

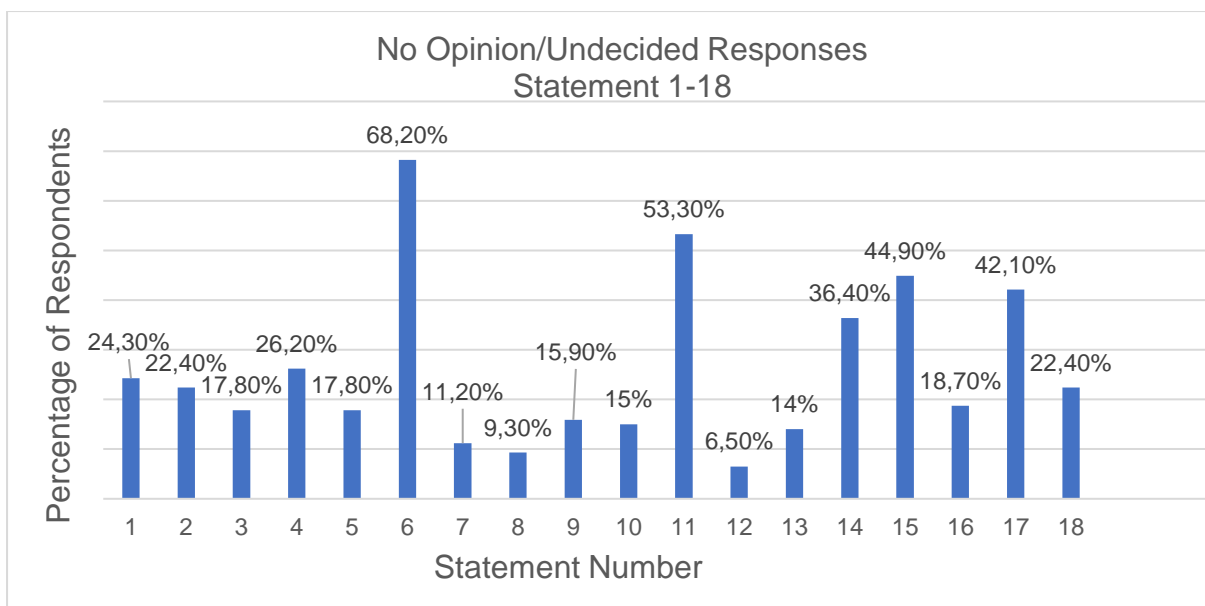


Figure 5.1 - No Opinion/Undecided Responses Statement 1 to 18

The majority of responses to Statement 6 and 11 (Figure 5.1) was No Opinion/Undecided. These statements have particular significance due to the high percentages (the majority) of respondents choosing this response and are examined in greater detail below.

Statement 6: I cannot find journal issues on the shelf even though they are indicated by the catalogue as available in the library.

In response to Statement 6, 68.20% of respondents indicated No Opinion/Undecided. This response garnered the greatest percentage of all No Opinion/Undecided responses. It is difficult to determine conclusively why this statement received this percentage; however, a number of possibilities can be suggested:

1. Many journal titles have shifted from print form to electronic. As a result of evolving ICTs, academic institutions have been collecting and generating digital resources, as noted in the literature (Masenya, & Ngulube, 2019; Masenya, & Ngulube. 2021).
2. Students are unfamiliar with journals in print form as they tend to access journals electronically.
3. Students' purpose for using the library is not to access journals or other materials and they cannot, therefore, agree or disagree.

Statement 11: Reference (user assistance) services in the library are readily available.

In response to Statement 11, 53.30% of respondents indicated No Opinion/Undecided. This response garnered the second greatest percentage of all No Opinion/Undecided responses. It is difficult to determine conclusively why this statement received this number of responses, however, the following suggestions can be made:

1. Students seeking reference services or assistance might avoid approaching library staff due to different reasons such as the fear of approaching someone for help.
2. Students might visit the library for reasons other than for reference assistance and therefore cannot respond differently.
3. Students might be unaware of the assistance library staff could provide to students.

Statements 14,15 and 17 (Figure 5.1) have significance due to the high percentages of respondents choosing this response.

Statement 14: There are enough full-text electronic journals related to my area of study:

In response to Statement 14, 36.40% of respondents indicated No Opinion/Undecided. It is difficult to determine why this response was chosen however the following reasons

can be suggested: It is possible that students use electronic journals infrequently enough for a strong response of agree or disagree. Alternatively, students might be unfamiliar with the full-text electronic journals available to them.

Statement 15: The library does not have a sufficient number of journal titles related to my area of study:

A high percentage (44.9%) of respondents indicated No Opinion/Undecided to Statement 15. The possible reasons for the response to Statement 6 could be applied to Statement 15. Both statements refer to print journals which are located on library shelves which could be unfamiliar to students or existing in fewer numbers than in previous years.

Statement 17: I can find the books that I need in the library most of the time:

In response to Statement 17, 42.10% of respondents indicated No Opinion/Undecided. The possible reasons for this response are difficult to identify conclusively; however, it could be suggested that students do not borrow books frequently enough to agree or disagree with the statement. Alternatively, it is possible that students do not use the library to borrow books and therefore could not respond differently.

Figure 5.2 presents the frequency of the No Opinion/Undecided response for Statements 19 to 36. The three highest percentages of respondents indicated No Opinion/Undecided in response to Statements 27, 22 and 20 respectively.

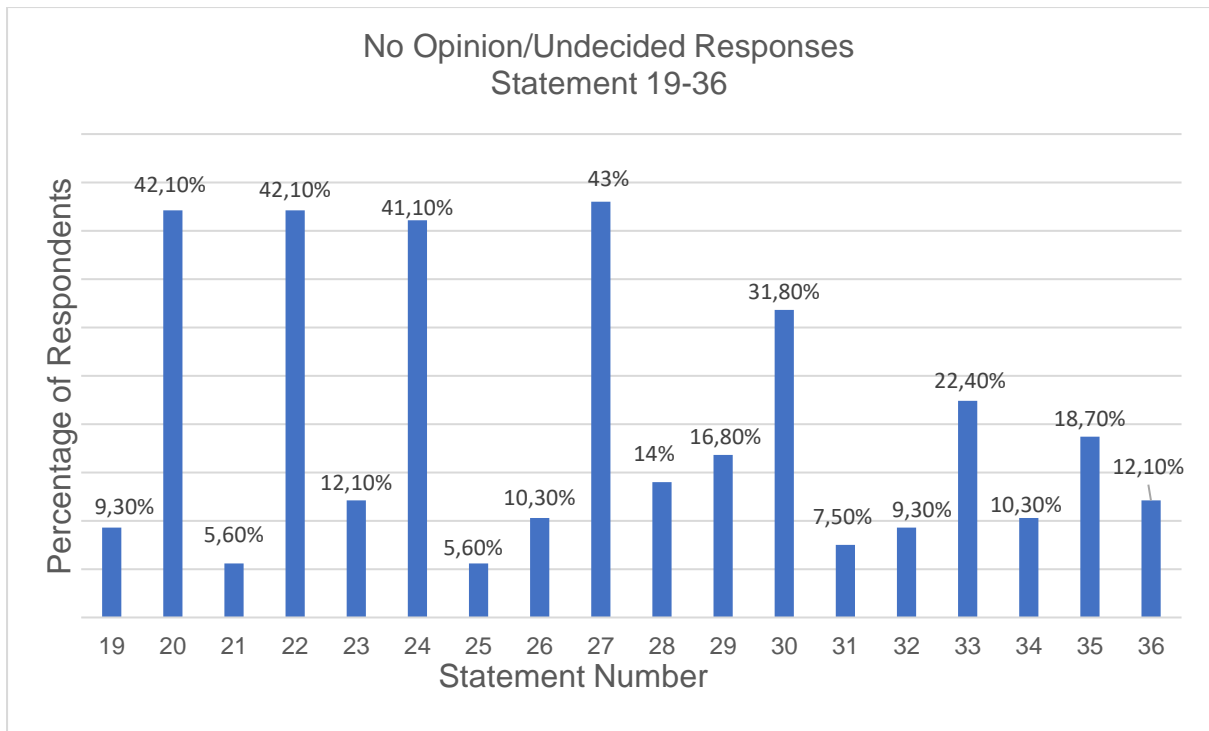


Figure 5.2 - No Opinion/Undecided Responses Statement 19 to 36

Statement 27: The librarians conduct classes on how to search:

A high 43% of respondents indicated No Opinion/Undecided to Statement 27. While this is a significant response, it is difficult to determine the reasons for this response. It can however be suggested that these students were unaware of what services library staff offer to students or alternatively that these students did not need assistance in searching for information.

Statement 20: The library does not have a sufficient number of books to cover my information needs:

A significant 42.10% of respondents indicated No Opinion/Undecided to Statement 20. Reasons for this response cannot be conclusively identified however it could be suggested that this response was chosen for a number of reasons. It is possible that their purpose for using the library was for a purpose other than borrowing books and therefore this statement was not relevant to them. Students might use alternate information sources or are unaware of the books, relating to their field of study, that are available.

Statement 24: The librarians do not provide training on how to use the databases:

The third highest frequency of this category of response was to Statement 24 (41.10%). It can be suggested, as noted with reference to responses to Statement 27, that students might be unaware of services and assistance available to them. Alternatively, these students might not have required assistance to use library databases.

In the following section reasons are suggested for the selection of the category No Opinion/Undecided in response to questions concerning the remaining statements which attracted fewer responses in this category than the Statements singled out for attention above. The discussion is presented under the six main factors. Tables 5.1 - 5.6 present the remaining statements which attracted fewer No Opinion/Undecided responses than those discussed above.

Statements relating to Library Staff:

<b>Statements</b>	<b>Percentage of No Opinion/Undecided</b>
1	24.3%
2	22.4%
7	11.2%
8	9.3%
9	15.9%
16	18.7%
20	42.1%
33	22.4%

Table 5.1 - No Opinion/Undecided Response to Library staff statements

The pattern of responses of No Opinion/Undecided to statements regarding Library staff could suggest:

- a) The students feel neutral towards the statements and do not feel sufficiently strongly to respond decisively.
- b) Students have had too few interactions with librarians or low participation in library instructional activities to respond

Statements relating to Library Environment:

<b>Statements</b>	<b>Percentage of No Opinion/Undecided</b>
3	17.8%
12	6.5%
19	9.3%
21	5.6%
25	5.6%
28	14.0%
31	7.5%

Table 5.2 - No Opinion/Undecided Response to Library environment statements

The frequency of responses of No Opinion/Undecided to statements regarding the Library environment could suggest that:

- a) The students feel neutral towards the statements and do not feel sufficiently strongly to respond decisively.
- b) Students have not used the library as a study space sufficiently frequently to respond decisively.

Statements relating to Library Resources and Services:

<b>Statement</b>	<b>Percentage of No Opinion/Undecided</b>
5	17.8%

Table 5.3 - No Opinion/Undecided Response to Library resources & services statements

The responses of No Opinion/Undecided to statements regarding Library resources and services could suggest that:

- a) The students feel neutral towards the statements and do not feel sufficiently strongly to respond decisively.
- b) Students do not use the library services sufficiently frequently to respond strongly to the statements.

Statements relating to Library Policies:

<b>Statements</b>	<b>Percentage of No Opinion/Undecided</b>
10	15.0%
23	12.1%
29	16.8%
36	12.1%

Table 5.4 - No Opinion/Undecided Response to Library policies statements

The responses of No Opinion/Undecided to statements regarding Library policies could suggest that:

- a) The students feel neutral towards the statements and do not feel sufficiently strongly to respond decisively.
- b) Students do not use the library to borrow materials and therefore cannot comment on library policies.

Statements relating to ICTs:

<b>Statements</b>	<b>Percentage of No Opinion/Undecided</b>
4	26.2%
13	14.0%
14	36.4%
26	10.3%
30	31.8%
34	10.3%
35	18.7%

Table 5.5 - No Opinion/Undecided Response to ICTs statements

The responses of No Opinion/Undecided to statements regarding ICTs could suggest that:

- a) The students feel neutral towards the statements and do not feel sufficiently strongly to respond decisively.
- b) Students do not use the library website or databases to search for information and therefore cannot comment on ICTs.

Statements relating to Information Literacy:

<b>Statements</b>	<b>Percentage of No Opinion/Undecided</b>
18	22.4%
32	9.3%

Table 5.6 - No Opinion/Undecided Response to Information Literacy statements

The responses of No Opinion/Undecided to statements regarding Information literacy could suggest that:

- a) The students feel neutral towards the statements and do not feel sufficiently strongly to respond decisively.
- b) These students do not use the library to search for information for their assignments and therefore cannot respond decisively. This reason can be linked back to Statement 27 (Figure 5.2).

**5.5 Summary of questionnaire responses:**

The aim of the questionnaire was to answer the question: How do undergraduate students experience the COL? The results of the questionnaire indicate that students experience the COL, in association with the six factors, in two ways: positively and negatively. No statement received entirely negative or positive responses. Every factor included negative and positive responses in varying degrees. A large percentage of respondents, however, indicated No Opinion/Undecided to the statements thus creating a gap in the analysis as these student experiences could be classified as neither positive nor negative. Without further data directly from participants, suggestions can only be made as to why the No Opinion/Undecided response was chosen.

**5.6 Levels of Library Anxiety:**

Low anxiety, Mild anxiety and No anxiety were the levels most frequently experienced overall by the entire cohort of participants. Mild anxiety had the highest percentage of association with anxiety factors excluding Library resources and services which had the highest percentage of association with No anxiety. The factor which recurringly had the highest percentage of association with levels of anxiety was the Library environment. It is suggested that all factors, excluding Library resources and services,

can cause the highest levels of mild anxiety. The factor which is least likely to cause Mild Anxiety or Low anxiety is Library resources and services. Lastly the factor most likely to cause levels of mild anxiety across all 107 students and within each Faculty is the Library environment.

## **5.7 UCT librarians and library anxiety**

Interviews with librarians aimed to determine what UCT librarians' views on library anxiety at UCT are.

Chapter 4 (section 4.3.1: Table 4.8) displayed the results of the first question asked of academic librarians: Does library anxiety exist at UCT? The consensus of academic librarians is that library anxiety does exist at UCT and elsewhere. They were immediately able to identify its many potential causes at UCT. Given their observation of the phenomenon of library anxiety at UCT, it is surprising that this topic has not been researched in South Africa until now.

### **5.7.1 Library Anxiety Solutions:**

Academic librarians from the faculties of Humanities and Science identified several possible solutions to library anxiety, some of which had already been implemented. These solutions could make the library experience easier for undergraduate students and could, as a result, ease library anxiety. Interestingly librarians pointed out the primary importance of the librarian-student interaction in comparison to that of the services provided by the library.

#### **5.7.1.1 Library-Student Interaction:**

The librarian-student interaction was identified as a crucial aspect of the library experience. Focussing on this interaction could assist in addressing negative opinions/perceptions of library staff identified in the Library Anxiety Questionnaire. While most respondents expressed positive opinions of library staff, a smaller number expressed negative opinions. These perceptions of the library staff could result in students developing a fear of approaching library staff as the literature points out (Mellon, 1986:163). Several of the proposed solutions such as librarians meeting students at their level could assist in altering

perceptions of library staff and create a good rapport with students. As a result, the potential for students to develop a fear of approaching staff could be reduced.

In the context of South Africa, one solution to library anxiety was suggested which could be argued to be significant. The COL has a staff diverse in background, languages spoken, age and gender. These pre-existing characteristics of the COL library staff were highlighted by a librarian as an important way in which staff can further develop a rapport with students from diverse demographic profiles and backgrounds. These characteristics are especially significant considering the diverse nature of the student population in South Africa (Naidoo & Raju, 2012:35 & Johnson, 2016).

#### **5.7.1.2 Library Services:**

Library services were seen by the librarians as an important influencing factor of positive library experiences. Responses to the AQAK indicated that students have experienced several negative experiences related to library services.

Simplifying the library website including language used could facilitate the experience of students using the Primo search function or the library website in general. The students struggling to use the library website and finding difficulty in information searches using electronic resources could find their experiences made easier. Secondly, peer assistants in the form of Library Buddies or Student assistants could assist students in navigating the library and its services.

Improving library services could help to change the negative opinions of students about library services and thus improve library experience.

#### **5.8 Summary of the Library Anxiety levels, contributing factors and solutions:**

The results of the Library Anxiety Questionnaire found that contributing factors to mild library anxiety were Library environment, Library staff, Library ICT and Library policies (4.3). The same factors identified in the Library Anxiety Questionnaire appear in the literature. Abusin & Zainab identified the following factors as contributing to student library anxiety: the library environment which included layout and cleanliness, staff behaviour towards students and library policies which included operating hours (2010:61-69). McPherson identified two recurring factors appearing in the literature

and the results of the Library Anxiety Questionnaire. The two factors identified were the library environment which included library signage and the size of the library and library staff which contributed to anxiety in a small number of participants in this study (2015:321).

While the results of the Library Anxiety Questionnaire did not deal specifically with the initial experiences of undergraduate students, the interview with Student 2 (4.4.1) provided an insight into this first experience. Student 2 described an initial fear that her student card would not give her access to the library echoing initial feelings of fear experienced by students in the literature of library anxiety (Abusin & Zainab,2010:55). Student 2 described uncertainty how to use the library, feeling overwhelmed by assignments and uncertainty with how to select appropriate information, echoing the findings of Abusin and Zainab (2010: 71) who found that psychological barriers such as low self-esteem or lack of confidence contributed to library anxiety (4.4.1). Student 2 described her minimal library usage and avoiding visiting the library alone which is characteristic of 'library avoidance,' an adverse effect of library anxiety found in the literature (Abusin & Zainab, 2010 & Abusin, Zainab & Karim, 2011).

Levels of library anxiety calculated from the results of the Library Anxiety Questionnaire found that while undergraduate students at UCT do experience library anxiety, the level of anxiety most commonly experienced by participants was Mild anxiety. This finding is echoed by McPherson who found that undergraduate students from the University of the West Indies experienced a mild level of anxiety (2015:322).

It was found that students experience the COL library in both positive and negative ways and that library anxiety does exist among undergraduate students in the three faculties of Commerce, Humanities and Science. Library anxiety exists in the UCT context at mild levels in varying degrees of association with the six contributing factors, The Library environment was the factor most frequently associated with library anxiety.

## **5.9 Recommendations:**

Considering the findings of this study the following recommendations are made:

1. This research can assist libraries with identifying whether library anxiety exists, how it manifests and what remedies can be used to mitigate the phenomenon. This research provided insights into library anxiety at the research site, thus

providing a platform for research at other sites. It would be of benefit to libraries to conduct research in library anxiety in their environment.

2. It is recommended that the research be extended at UCT beyond the three faculties of Humanities, Science and Commerce. Library anxiety could affect students who frequent other libraries used by UCT undergraduate students, such as the Hiddingh Hall Library, Brand van Zyl Law Library, the Bongani Mayosi Health Sciences Library, Bolus Herbarium Library, Built Environment Library, Institute of Child Health Library, Special Collections and WH Bell Music Library.
3. Library anxiety could have an effect on postgraduate students who are diverse in age and background and thus could have very different experiences of the academic library and/or library anxiety. It is therefore recommended that research be extended to include postgraduate students.

### **5.10 Conclusion:**

This research, underpinned by the Library Anxiety Theory, aimed to answer the questions: How do undergraduate students experience the COL library, do current UCT undergraduate students experience library anxiety and how does it manifest, what are UCT librarians' views on library anxiety in the UCT library? It also explored what remedies could be used to mitigate the phenomenon of Library Anxiety.

Results of the questionnaire show that students have both positive and negative experiences varying in degree of intensity. It was found that the most common level of library anxiety across the respondent cohort was mild anxiety. Furthermore, an interview with an undergraduate student provided a first-hand description of self-identified library anxiety. Librarians confirmed the existence of library anxiety at UCT, providing possible causes of and solutions to library anxiety. Library anxiety might develop as a result of students being underprepared, their lack of information and computer literacy, self-doubt, and negative reactions to aspects of the library environment. Librarians identified solutions for potential library anxiety, highlighting the librarian-student relationship.

The results of the library anxiety questionnaire, interviews with undergraduate students and interviews with librarians provide evidence of the existence of library

anxiety at UCT. Further research could provide more insight into library anxiety experienced by UCT students from other faculties.

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## APPENDIX A: LIBRARY ANXIETY QUESTIONNAIRE

The Library Anxiety Questionnaire is a questionnaire adjusted with permission from the AQAK Library Anxiety Scale.

The AQAK questionnaire was developed by four authors Mumtaz Ali Anwar, Charlene L. Al-Qallaf, Husain A Al-Ansari and Noriah M. Al-Kandari. The scale was named using the initial of the last name of each author.

“Whenever we encounter a new person, a facility, a service, or an electronic information resource anywhere, especially for the first time, we can feel somewhat hesitant in approaching or using it. If this hesitancy is not removed quickly and changed into a positive attitude, we can feel uncomfortable in future situations. This feeling has been described as ‘frustration’, ‘anxiety’, or ‘fear’. When undergraduate students join the university, they encounter situations that they did not face at school and can thus be hesitant to use new facilities” (Anwar et al. 2012).

I am conducting research for my Master’s degree (MLIS) to understand this phenomenon of ‘hesitancy’, ‘fear’, or ‘anxiety’ by asking undergraduate users of the library to answer the Library Anxiety Questionnaire set out below. For the purpose of my research, I have adopted the following definition of ‘library anxiety’, a term that covers the feelings noted above.

“When students are confronted with an information need and are required to visit the library, they can become so anxious that they cannot approach the problem in a logical or efficient way... it was logical that students’ fear of the academic library be described as ‘library anxiety’ ” (Mellon, 1986: 279).

Your participation will help me understand the phenomenon of library anxiety and be of potential use to any academic library wishing to address this problem. In addition, I would appreciate you making yourself available for an interview via phone call. I have been granted ethics clearance for the study by UCT. My supervisor in the Department of Knowledge and Information Stewardship at UCT is Emeritus A Prof Mary Nassimbeni, mary.nassimbeni@uct.ac.za.

Julia Smith

Master’s in Library and Information Studies

Department of Knowledge and Information Stewardship.

smtjul014@myuct.ac.za

## LIBRARY ANXIETY QUESTIONNAIRE

### CONSENT:

As a research participant you have the following rights:

1. You have the right to withdraw from participating at any point without explanation.
2. You have the right to remain anonymous, you will not be asked to provide your name or contact details. The only exception to this would be if you consent to a telephone interview.
3. You have the right to confidentiality. Any information you provide will remain confidential.

You are being asked to provide consent prior to completing the questionnaire

I fully understand the research being conducted and my role in the research. I understand my rights as a participant, and I hereby give my consent to participate.

-----

### BIOGRAPHICAL INFORMATION

Please indicate your level of studies

Please Indicate your faculty

INSTRUCTIONS: You are being asked to respond to the following 35 statements concerning your feelings about the library.

Please choose the number against the statement which most closely matches your feelings about each.

1= Strongly Disagree

2= Disagree

3= No Opinion/Undecided

4= Agree

5= Strongly Agree

S01	The library staff is unfriendly.	1	2	3	4	5
S02	The library staff guides students to find information.	1	2	3	4	5
S03	The library does not have enough study space.	1	2	3	4	5
S04	The design of the library's Web site (homepage) is easy to use.	1	2	3	4	5
S05	The library arranges instructional activities (tours, lectures, workshops etc.) on how to use the library.	1	2	3	4	5
S06	I cannot find journal issues on the shelf even though they are indicated by the catalogue as available in the library.	1	2	3	4	5
S07	The library staff is approachable.	1	2	3	4	5
S08	There is often someone available in the library to help me.	1	2	3	4	5
S09	The library staff is not helpful.	1	2	3	4	5
S10	I do not understand the library policies (e.g., photocopying, borrowing of materials, remote access, etc.).	1	2	3	4	5
S11	Reference (user assistance) services in the library are readily available.	1	2	3	4	5
S12	The library is not a comfortable place to study.	1	2	3	4	5
S13	I do not know how to search for information in the library's databases.	1	2	3	4	5
S14	There are enough full-text electronic journals related to my area of study.	1	2	3	4	5

S15	The library does not have a sufficient number of journal titles related to my area of study.	1	2	3	4	5
S16	The library staff does not care about students' needs.	1	2	3	4	5
S17	I can find the books that I need in the library most of the time.	1	2	3	4	5
S18	I find difficulty selecting the right information sources for my assignments.	1	2	3	4	5
S19	I can find a place to study in the library	1	2	3	4	5
S20	The library staff provides help on how to use databases.	1	2	3	4	5
S21	The library provides enough quiet spaces to study	1	2	3	4	5
S22	The library does not have a sufficient number of books to cover my information needs.	1	2	3	4	5
S23	I am not familiar with library policies.	1	2	3	4	5
S24	The librarians do not provide training on how to use the databases.	1	2	3	4	5
S25	The library atmosphere encourages me to use the library.	1	2	3	4	5
S26	I do not know how to use the library catalogue (Primo) effectively.	1	2	3	4	5
S27	The librarians conduct classes on how to search, evaluate, and use information.	1	2	3	4	5
S28	The decor in the library is good (e.g., colour, lighting, plants, etc.)	1	2	3	4	5
S29	I do not understand the circulation (borrowing) policy.	1	2	3	4	5
S30	The library's Web site (homepage) provides access to information resources that I need.	1	2	3	4	5
S31	The temperature in the library is comfortable.	1	2	3	4	5
S32	I do not know how to begin searching for information for my course assignments and research papers.	1	2	3	4	5
S33	The library staff seems to be busy and not available for assistance.	1	2	3	4	5
S34	I do not know how to find information using electronic resources.	1	2	3	4	5

S35	I feel confident using the library computers to find information and to complete my tasks	1	2	3	4	5
S36	I am satisfied with the opening hours of the library.	1	2	3	4	5

Anwar, M.A., Al-Qallaf, C.L, Al-Kandari, N.M & Al-Ansari, H.A. 2011. AQAK: A library anxiety scale for undergraduate students. *Journal of Librarianship and Information Science*. 44(1): 36-46.

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## **APPENDIX B: INTERVIEW SCHEDULE - UNDERGRADUATE STUDENTS**

Library Anxiety and the Academic Library: an investigation into student library experiences at the University of Cape Town

My name is Julia Smith (smtjul014@myuct.ac.za) and I am registered for the Master's in library and Information Studies in the Department of Knowledge and Information Stewardship. I am investigating the phenomenon of 'library anxiety'. 'Library anxiety' is a term used to describe university students' negative experiences such as feeling lost or fearful when using their institution's academic library (Mellon, 1986). My supervisor is Emeritus Assoc Prof Mary Nassimbeni (mary.nassimbeni@uct.ac.za).

This research aims to gain a deeper understanding of the experiences of UCT students from the Humanities, Science and Commerce Faculties when using the Chancellor Oppenheimer library and assess whether they experience library anxiety. In addition to a survey, data will be gathered through interviews with undergraduate students and academic librarians. The student interview sample comprises a sample of those undergraduate students who completed the questionnaire, and the librarian sample will be drawn from academic librarians working in the same faculties. Interviews will take place over the period of one week at a time in 2021 still to be decided. Interview times will be determined by the availability of participants. The interview should take no longer than 30 minutes.

### Undergraduate Student Interview Questions:

1. Can you describe a situation in which you experienced negative feelings when using the academic library?
2. Do you have any other comments on this topic?

Thank you for your participation.

## APPENDIX C: INTERVIEW SCHEDULE - SUBJECT LIBRARIANS

Library Anxiety and the Academic Library: an investigation into student library experiences at the University of Cape Town

My name is Julia Smith (smtjul014@myuct.ac.za) and I am registered for the Master's in Library and Information Studies in the Department of Knowledge and Information Stewardship. My supervisor is Emeritus Assoc Prof Mary Nassimbeni (mary.nassimbeni@uct.ac.za). I have obtained ethics clearance for my study from UCT.

I am investigating the phenomenon of 'library anxiety'. 'Library anxiety' is a term used to describe university students' negative experiences such as feeling lost or fearful when using their institution's academic library (Mellon, 1986). This research aims to gain a deeper understanding of UCT students' experiences when using the Chancellor Oppenheimer library and to assess whether they experience library anxiety. In addition to a survey of undergraduate students from the Humanities, Science and Commerce Faculties, data will be gathered during individual interviews with undergraduate students and academic librarians. The student interview sample will be comprised of the undergraduate students who completed the questionnaire. The librarian sample will be drawn from UCT librarians working with these faculties. All participants will be included in the samples based on their willingness to participate. Interviews will take place over the period of one week at a time in 2021 still to be decided. Interview times will be determined by the availability of participants.

### Librarian Interview Questions:

1. Had you heard of the term 'library anxiety' prior to this interview?
2. How often do you interact with undergraduate students?
3. For what purpose do students interact with you?
4. Can you describe an interaction with a student who had a negative experience when using the library? This can be a first-hand observation, or a report from a third party.
5. What remedies can you suggest to mitigate the phenomenon of library anxiety?
6. Would you like to make any other comment?

Thank you for your participation.

**APPENDIX D: RESEARCH INTERVIEW - UNDERGRADUATE STUDENTS  
CONSENT FORM**

Library Anxiety and the Academic Library: An investigation into undergraduate student library experiences at the University of Cape Town  
Master's Researcher: Julia Smith

Department of Knowledge and Information Stewardship

Library anxiety is a term used to describe university students' negative experiences such as feeling lost or fearful when using their institution's academic library (Mellon, 1986). This research aims to investigate, through interviews, undergraduate students' experiences of library anxiety at the University of Cape Town. Your participation in this research interview will assist in gaining a deeper understanding of students' experiences and assess whether UCT students experience library anxiety.

Participation in this research interview is not a commitment, you may withdraw from participating at any point without giving a reason. Your identity will remain anonymous throughout this process and any information provided will remain confidential.

I \_\_\_\_\_ (Full name) consent to participating in this research interview having been advised by the researcher of the scope and purpose of the investigation, and my role. I agree with the following statements.

1. The nature of the research and my role in the research have been fully explained and all questions I may have had were answered in full.
2. I give permission for the interview to be recorded.

Participant Signature \_\_\_\_\_ Date: \_\_\_\_\_

Researcher Signature \_\_\_\_\_ Date: \_\_\_\_\_

Contact details:  
smtjul014@myuct.ac.za  
0782922688

Supervisor: Em Assoc Prof Mary Nassimbeni, mary.nassimbeni@uct.ac.za

**APPENDIX E: RESEARCH INTERVIEW - LIBRARIANS  
CONSENT FORM**

Library Anxiety and the Academic Library: An investigation into undergraduate student library experiences at the University of Cape Town  
Master's Researcher: Julia Smith

Department of Knowledge and Information Stewardship

Library anxiety is a term used to describe university students' negative experiences such as feeling lost or fearful when using their institution's academic library (Mellon, 1986). This research aims to investigate, through interviews, academic librarians' views of library anxiety at the University of Cape Town. Your participation in this interview will assist me in gaining a deeper understanding of students' library experiences and assess whether UCT students experience library anxiety.

Participation in this research interview is not a commitment; you may withdraw from participating at any point without giving a reason. Your identity will remain anonymous throughout this process and any information provided will remain confidential.

I \_\_\_\_\_ (Full name) consent to participating in this interview, having been advised by the researcher of the scope and purpose of the investigation, and my role. I agree with the following statements.

1. The nature of the research and my role in the research have been fully explained and all questions I may have had were answered in full.
2. I give my permission for the interview to be recorded.

Participant Signature \_\_\_\_\_ Date: \_\_\_\_\_

Researcher Signature \_\_\_\_\_ Date: \_\_\_\_\_

Contact details:  
smtjul014@myuct.ac.za  
0782922688

Supervisor: Em Assoc Prof Mary Nassimbeni, mary.nassimbeni@uct.ac.za