

**Information needs and information seeking behaviour of international students at the
University of KwaZulu-Natal, Pietermaritzburg Campus.**

By

Moïse Majyambere

BBA (Finance), PGDIS, University of KwaZulu-Natal

Submitted in partial fulfilment of the requirements for the degree of Masters of Information Studies (coursework), Information Studies Programme, School of Social Sciences, University of KwaZulu-Natal, Pietermaritzburg, South Africa.

Declaration

I, Moïse Majyambere declare that:

- (i) The research reported in this dissertation, except where otherwise indicated, is my original work.
- (ii) This dissertation/thesis has not been submitted for any degree or examination at any other university.
- (iii) This dissertation/thesis does not contain other persons' data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons.
- (iv) This dissertation/thesis does not contain other persons' writing, unless specifically acknowledged as being sourced from other researchers. Where other written sources have been quoted, then:
 - (a) their words have been re-written but the general information attributed to them has been referenced;
 - (b) where their exact words have been used, their writing has been placed inside quotations marks, and referenced.
- (v) This dissertation/thesis does not contain text, graphics or tables copied and pasted from the Internet, unless specifically acknowledged, and the source being detailed in the dissertation and in the References sections.

Signed: Date:

Dedication

This study is dedicated to my late parents. Beautiful memories of you are deeply locked into my heart. This is my thanks to my sisters and brother for their prayers and understanding of the fact that I had to spend lots of time away from home.

Abstract

The purpose of this study was to identify the information needs and information seeking behaviour of international students at the University of KwaZulu-Natal, Pietermaritzburg Campus (UKZNP). The study assisted in identifying different information services offered by the International Student Office (ISO). It also determined various information seeking situations involved in relation to academic needs and personal issues of international students.

The approach that the researcher undertook was a triangulation approach where both quantitative and qualitative data were collected. Instruments used for data collection were a self-administered questionnaire and semi-structured interview. A sample size of 150 international students was surveyed, with 137 students responding, giving a response rate of 91.3%. The Head of the International Student Office (HISO) was also interviewed. The validity and reliability of the instrument were established by pre-testing the questionnaire with four international students enrolled at UKZNP. The quantitative data was analysed using SPSS and the qualitative data was analysed using thematic content analysis. The international students' information seeking behaviour was identified using Wilson's (1999) model of information behaviour which suited the group under study.

The outcome of the study revealed that more than half, 62.7%, of academic needs were characterized by two situations, namely, the registration process (32.2%) and issues around lectures (30.5%). Other main issues discussed were based on information literacy skills and English language problems experienced by international students enrolled at UKZNP. In terms of personal issues, a majority (60.2%) of respondents mentioned either accommodation (34.9%) or health issues (25.3%). A minority, just on 30%, of the respondents resided on campus and for the majority of the respondents who lived off campus, accessing the Library and computer LANs after hours was not possible as transport at night was not always available. Thus the accommodation need was regarded as a very significant problem. The study indicated that two main sources used in relation to academic needs were library resources and information from the Faculty offices, while the most used source by international students for their personal issues was the consultation of colleagues. Based on the results and conclusions of the study, recommendations for action and further research were made. Recommendations included the need to consider a temporary registration period during which the complex requirements of the registration process could be pursued and satisfied by the students and, in response to the accommodation crisis experienced by students, consideration be given to the Student Housing Office giving priority to first year international students in particular when allocating rooms.

Acknowledgements

I would like to express my sincere gratitude to:

The one and only true God for carrying me through the courses and for giving me the strength and grace I needed to press on regardless of the situation.

My supervisor, Mr Athol Leach, for his patience and encouragement during the writing up the study, for his professional and excellent supervision.

The Head of the International Student Office, Mrs Marie-Anna Marais, who participated in the interview schedule by spending her time and providing useful information for the study.

The international students enrolled at Pietermaritzburg Campus for taking part in the study.

The information studies staff, Prof Christine Stilwell, Dr Ruth Hoskins and Mrs Fiona Bell for the valuable comments on the proposal and questionnaire.

The subject librarian, Dr Rose Kuhn for the proof-reading of, and making suggestions for this thesis.

The lecturer, Mark Rieker for his assistance with SPSS.

My friends, Ferdinand Niyimbanira, Tony Gaston, Dr J. B. Twayigira and Lynne Stone, for believing in me and for the moral support throughout the duration of the study.

Not forgetting my ever supportive friends, Francis Muzindutsi and Lambert Nizeyimana.

Most importantly, my sister, Marcelline Mukakarangwa for your advice, support and encouragement throughout my studies.

Table of contents

Declaration.....	ii
Dedication.....	iii
Abstract.....	iv
Acknowledgements.....	v
Table of contents.....	vi
List of tables.....	x
List of figures.....	xi
List of abbreviations and acronyms	xii
List of appendices	xiv
Chapter 1: Introduction to the study	1
1.0 Introduction.....	1
1.1 Background to the study	1
1.1.1 International students worldwide.....	1
1.1.2 International students and the University of KwaZulu-Natal	2
1.2 Problem statement.....	3
1.3 Research questions.....	4
1.4 Rationale of the study	5
1.5 Delimitations and limitations.....	5
1.6 Definition of key terms	6
1.6.1 Information	6
1.6.2 Information needs	6
1.6.3 Information seeking	7
1.6.4 Information seeking behaviour	7
1.7 UKZN policy on international students	8
1.8 Methodology	9
1.9 Study outline	9
1.10 Summary of the Chapter	10
Chapter 2: Conceptual framework and literature review.....	11

2.0 Introduction.....	11
2.1 Conceptual framework.....	11
2.2 Literature review.....	13
2.2.1 International students in the South African context.....	14
2.2.2 The role of the International Student Offices.....	15
2.2.3 Information needs of international students.....	15
2.2.4 Main sources of information used by international students.....	16
2.2.5. Major problems experienced by international students.....	19
2.2.6 Preferred information format.....	22
2.2.7 Initiatives to improve information services.....	22
2.2.8 Studies on information seeking behaviour of international students.....	23
2.3 Summary of the Chapter.....	25
Chapter 3: Research methodology.....	26
3.0 Introduction.....	26
3.1 Research design.....	26
3.2 Choice of method.....	27
3.3 Research population.....	29
3.3.1 Population size.....	29
3.3.2 Sample.....	30
3.4 Data collection instruments.....	31
3.4.1 Semi-structured interview.....	31
3.4.2 Self-administered questionnaire.....	33
3.4.3 Forms of questions.....	34
3.4.4 Content of questionnaire used in the study.....	35
3.4.5 Pre-testing of questionnaire.....	36
3.4.6 Administering the questionnaire.....	37
3.4.7 Response rate.....	37
3.5 Data analysis.....	38
3.6 Reliability and validity: evaluation of the method used.....	38
3.7 Summary of the Chapter.....	39
Chapter 4: Research results.....	40
4.0 Introduction.....	40
4.1 Response rate.....	40
4.2 Questionnaire results.....	40

Section 1	41
4.3 Background information	41
4.3.1 Gender and age.....	41
4.3.2 Respondent’s country of origin.....	42
4.3.3 Home language	43
4.3.4 English language problems	45
4.3.5 Resolution of English language problems.....	47
4.3.6 Level of study and category programme.....	48
4.3.7 Residence	49
Section 2	50
4.4 Information needs and information seeking behaviour of international students	50
Subsection A	50
4.4.1 Information needs related to academic studies	50
Subsection B	56
4.4.2 Information needs related to personal issues	56
Section 3	60
4.5 International Student Office and additional comments.....	60
4.5.1 Information related to International Student Office.....	60
4.5.2. Additional comments	66
4.6 Results from the interview with the Head of the International Student Office.....	67
4.6.1 General information	67
4.6.2 Services provided by the International Student Office (ISO)	68
4.6.3 Cooperation of the ISO with other student services and additional comments.....	72
4.7 Summary of the Chapter	73
Chapter 5 Discussion of results.....	74
5.0 Introduction.....	74
5.1 Background information	75
5.1.1 Demographic profile of the respondents.....	75
5.1.2 Country of origin and home languages	76
5.2 English language problems	77
5.3 Responses to the research questions as regards information seeking behaviour	78
5.4 Information seeking behaviour	78
5.4.1 Information needs related to academic studies	78
5.4.2 Information needs related to personal issues	87

5.5 The International Student Office (ISO) and its services	91
5.5.1 Awareness of the ISO's services and channels used.....	91
5.5.2 ISO's services considered of use	92
5.5.3 Reasons for considering the ISO's services not useful	92
5.5.4 Other services the ISO should be providing	93
5.5.5 Under-utilization of ISO's services.....	94
5.5.6 Ways to improve services to international students at UKZNP.....	94
5.5.7 Challenges in the provision of ISO services	95
5.5.8 Initiatives for service provision.....	95
5.5.9 Cooperation of the ISO with other student services.....	95
5.5.10 Additional comments	96
5.6. Summary of the Chapter	97
Chapter 6 Conclusions and recommendations	98
6.1 Introduction.....	98
6.2 Revisiting the research questions.....	98
6.3 Summary of the study	99
6.4 Conclusions.....	100
6.4.1 What is the demographic profile and academic level of study of international students at UKZNP?	100
6.4.2 What are the languages spoken by international students?.....	101
6.4.3 What kinds of information needs do international students have?.....	102
6.4.4 How do international students obtain the information they need?.....	103
6.4.5 Where do international students find the information they are seeking?	104
6.4.6 What problems do international students experience in terms of acquiring information?. 105	
6.4.7 What steps is UKZNP undertaking to improve services for the international students? ... 105	
6.4.8 How can services that are offered to international students be improved?.....	106
6.5 Recommendations.....	107
6.6 Suggestions for further research	109
6.7 Summary of the Chapter	109
List of works cited.....	110

List of tables

Table 1 Gender and age distribution	41
Table 2 Country of origin	43
Table 3 Home language	44
Table 4 Major English language problems	46
Table 5 Measures applied to resolve English language problems	47
Table 6 Respondents by level and category of study	48
Table 7 Year of study and undergraduate institution	49
Table 8 Major information seeking situation as regards academic issues	51
Table 9 Major sources of information.....	52
Table 10 Success with sources consulted	53
Table 11 Major problems experienced by respondents.....	54
Table 12 Preferred information format	55
Table 13 Major information seeking situation for personal issues	56
Table 14 Major information sources used by respondents.....	57
Table 15 Preferred information format	59
Table 16 Channels used to know about ISO's services	61
Table 17 Usefulness of ISO's services offered to respondents	62
Table 18 Additional ISO's services suggested by respondents	64
Table 19 Improvements of UKZNP services to international students.....	65

List of figures

Figure 1 Wilson's 1999 model of information behaviour	12
Figure 2 English language problems.....	45
Figure 3 Usefulness of information obtained.....	58
Figure 4 Awareness of ISO services	61
Figure 5 Success of ISO as one of the sources consulted	85

List of abbreviations and acronyms

ADO	Academic Development Office
ASK	Anomalous State of Knowledge
CBD	Central Business District
DVD	Digital Video Disk
HISO	Head of International Student Office
ICTs	Information and Communication Technologies
IEASA	International Education Association of South Africa
IIE	Institute of International Education
ILL	Inter Library Loan
ISO	International Student Office
LAN	Local Area Network
MIS	Masters in Information Studies
MSN	Microsoft Network
OPAC	Online Public Access Catalogue
PhD	Doctoral Degree
R	South African Rand
RAC	Registration Appeals Committee
RMS	Risk Management Services
SABINET	South African Bibliographic Information Network
SADC	Southern African Development Community
SCC	Student Counselling Centre
SFC	Student Funding Centre
SPSS	Statistical Package for Social Sciences
SRC	Student Representative Council
TV	Television

TWU	Texas Woman's University
UK	United Kingdom
UKZN	University of KwaZulu-Natal
UKZNP	University of KwaZulu-Natal, Pietermaritzburg Campus
UNESCO	United Nations Education Scientific and Cultural Organisation
USA	United States of America
WWW	World Wide Web

List of appendices

Appendix 1: Letter of consent for the international students.....	121
Appendix 2: International student’s questionnaire.....	122
Appendix 3: Letter of consent for the Head of International Student Office.....	127
Appendix 4: Interview schedule for the Head of International Student Office.....	128

Chapter 1: Introduction to the study

1.0 Introduction

Chapter 1, the introductory chapter, provides the background to the study and an outline of the research problem. This is followed by the research questions, the significance of the study as well as its scope and limitations. Definitions of key terms used in the study are provided followed by a discussion of the UKZN policy on international students. Finally, the methodology used in the study is outlined and the structure of the thesis is briefly delineated.

1.1 Background to the study

The background to the study provides the foundation for the whole study. The background comprises a discussion of international students globally and, more specifically, international students at the University of KwaZulu-Natal (UKZN).

1.1.1 International students worldwide

Globally, the enrolment of international students is not regarded as a recent university phenomenon. The 2007 figures for the number of students leaving their home countries for their higher education abroad was around 2.8 million (UNESCO Institute for Statistics 2009). This represents an increase of 4.6% on the previous year and growth of almost 53% since 1999. Interestingly, this survey has revealed that almost two thirds of international students were enrolled in seven countries, namely, the United States of America (USA), United Kingdom (UK), France, Germany, Australia, China and Japan. Furthermore, this report of trends in international student mobility has indicated that China was the largest source of students going abroad for their studies with almost 40,000 students, and the two top host countries for those Chinese students were the USA (21.4%) and the UK (12.6%).

The Institute of International Education (2009) states that “the number of international students at Colleges and Universities in the United States of America (USA) increased by 8% to an all-time high of 671,616 in the 2008/09 academic year. This was the largest percentage increase in international student enrolments since 1980-1981, and marked the third consecutive year of significant growth with increases of 7% in 2007-2008 and 3% in 2006-2007”. International students have diverse language, cultural, and educational backgrounds. According to the Texas Woman's University (TWU) International Education Office's student statistics, 80 percent of students in 2007 were female and 20 percent male. They were from 61 countries; 62 percent were graduate students, while 38 percent of the students were undergraduates (Yi 2007: 666).

Through connecting communities around the world, globalisation can contribute to both the context and content of economic activity (Lewis, Thornhill, and Saunders 2003: 36; Held et al. 1999: 2). Although the concept of globalisation is not new, in the new millennium it still has a crucial impact on education (Ohmae 2005 and Muller, Cloete and Badat 2001). Moloji, Gravett and Petersen (2009) looked at the impact of globalisation within the context of education in South Africa. They noted that South African universities always need core alliances and networks with other higher education institutions around the world. They concluded that these alliances and networks will create opportunities in terms of sharing knowledge and skills and also build economic strength. In line with this thought, internationalisation of the higher education sector across the world has represented an essential element for each nation's development and this applies equally to South African universities. The survey conducted by Botha (2010) shows that compatibility often exists between internationalisation and Africanisation of higher education in South Africa.

1.1.2 International students and the University of KwaZulu-Natal

The University of Natal was founded in Pietermaritzburg as Natal University College in 1910 with 57 students' enrolled (Brookes and Webb 1965: 247) and the UKZN was formed on 1 January 2004 as a result of the merger between the University of Natal and the University of Durban-Westville. The UKZN has five campuses, four in the Durban area (Edgewood Campus since 2001, Nelson R. Mandela School of Medicine, Howard College and Westville Campus) and one in Pietermaritzburg (Pather 2004: 20).

The mission of UKZN is to be the “premier University of African scholarship” (UKZN 2011a). The University aims to continue to seek global partnerships that provide opportunities for both local and international students, and the staff. UKZN has a total student population of approximately 42000, 20% of whom are postgraduates. The internationalisation of the university is focused primarily on its postgraduate enrolments which comprise 14% of the total postgraduate enrolments, while international undergraduate enrolments comprise only four percent of the total undergraduate enrolments (UKZN 2011a).

In the context of supporting and assisting the significant number of international students who come from all over the world to study at UKZN, the University has initiated three international student offices (ISO) which are located at the Westville, Howard College and Pietermaritzburg campuses. These three offices are in charge of assisting international students registered on all five campuses. As far as this study is concerned, the ISO functions as a channel of communication by interconnecting the University authorities (advisors) with a significant number of international students studying at the institution. According to the UKZN mission statement (2004) “the vision of the University of KwaZulu-Natal is to combine its global strength both in scholarship and research with a focused emphasis on the African renaissance”. It is in terms of this mission that the UKZN Pietermaritzburg Campus (UKZNP) has an ISO to assist international students most of whom are from the African continent. In the 2011 academic year, on the Pietermaritzburg campus, 828 international students from Africa were registered, out of a total number of 866 international students (Marais 2011). International students on the Pietermaritzburg Campus thus form a large and arguably important cohort. Their information needs should therefore not be neglected.

1.2 Problem statement

International students at UKZNP face a range of difficulties as regards meeting a variety of information needs in both the academic and personal spheres of their lives, and their information seeking behaviour is affected by a wide variety of factors.

International students at the UKZNP are divided into two main categories. The first category is students predominantly from America and Europe who are on a university exchange programme, and stay for a short period of one semester. The other category of students

comprises the ones who stay for an entire degree and they are largely students from other African countries. The language of communication and teaching at UKZN is English. Most of the international students do not speak English as their mother tongue. The researcher agrees with Stilwell (1991: 20) when she states that “every society has specific needs and the provision of the information to assist this society to meet these needs should be in a form and language that is useful to them”. This applies equally to the international students on the Pietermaritzburg Campus. For example, the English language which is commonly used on campus is a second or even third language to the majority of such students. This will immediately create communication barriers and make the satisfaction of information needs of these students more difficult. It is inevitable that these international students, being far away from home, will have questions about a range of issues that need answers. These students are new to South Africa (and possibly university “life”) and hence will need information to assist them to adjust and settle on campus and in the broader society of which UKZN is a part.

Given the above problem, the aim of the study was to investigate the information needs and information seeking behaviour of international students at UKZN’s Pietermaritzburg Campus. In doing so the study was guided by the following research questions.

1.3 Research questions

1.3.1 What is the demographic profile and academic level of study of international students at UKZNP?

1.3.2 What are the languages spoken by international students?

1.3.3 What kinds of information needs do international students have?

1.3.4 How do international students obtain the information they need?

1.3.5 Where do international students find the information they are seeking?

1.3.6 What problems do international students experience in terms of acquiring information?

1.3.7 What steps is UKZNP undertaking to improve services for the international students?

1.3.8 How can services that are offered to international students be improved?

1.4 Rationale of the study

Since the researcher is one of the members of the community of international students at UKZNP, he has first-hand experience of the problems which international students face. The fact that international students have different educational, cultural and language backgrounds, does suggest that they have a variety of information needs in the South African university context. While previous studies concerning the information needs of international students have been undertaken (see Chapter 2) they have been conducted at the Post-graduate Diploma level and are concomitantly small in scale. The present study intends to take these studies forward and provide a more comprehensive and in depth study in terms of identifying the information needs and information seeking behaviour of the international students on the Pietermaritzburg campus. As pointed out, the international students form a significant cohort of students on UKZNP and it is hoped that the findings of the study will benefit both these and future students. The findings may be able to assist the University in improving information delivery systems and at the same time contribute to ensuring the quick and easy integration of international students at UKZNP.

1.5 Delimitations and limitations

Creswell (1994a: 105) opines that “boundaries are necessary in a study to provide direction for the terms used, for the scope of the study and for the potential audience”. In similar vein, Locke, Silverman and Spirduso (2010: 41) point out that all studies have inherent delimitations and limitations. The limitations may be listed in a separate section or simply discussed as they arise. If they are few in number and perfectly obvious, the latter is desirable. The study was delimited to the Pietermaritzburg Campus of UKZN, South Africa because of the time constraints of a course work masters, limited financial resources and access to study participants. Leedy and Ormrod (2001: 103) maintain that time and money constraints are common to all research studies. The study comprised a sample of all international students registered for the 2011 academic year on the Pietermaritzburg Campus, including both undergraduate and postgraduate students (see Chapter 3).

1.6 Definition of key terms

In the context of this study the working definitions of certain key terms need to be provided. These are listed and defined below.

1.6.1 Information

Information has been defined differently by many scholars. Case (2002: 62), for example, defines information “as data that has been gathered, processed and analysed to provide a useful result called information”. According to Saracevic and Wood (1981: 11) information is the meaning that a human assigns to data by means of the known conventions used in their representation” and mostly the definition is influenced by the discipline with which they are associated. Kaniki (2001: 191), coming from an information studies perspective, defines information as “ideas, facts, imaginative works of the mind and data of value, potentially useful in decision making, question answering and problem solving. It leads to a state of knowing”. In this study the preferred definition is the latter definition.

1.6.2 Information needs

Feather and Sturges (1997: 216) provide a definition of information needs which is adopted in this study. The authors define information needs as “the expression used in a wide range of ways to refer to any context where information is sought and it represents all forms of information seeking”. Needs vary within society and individuals, and needs keep on changing over a period of time. Case (2002: 69) regards an information need as “a function of extrinsic uncertainty produced by a perceived discrepancy between the individual’s current level of certainty about important environmental objects and criterion state that he seeks to achieve.” Once there is uncertainty, there is a need to carry out some kind of information search in order to solve the information problem which gave rise to the uncertainty. Nicholas (2000: 20) maintains that information needs arise when a person recognises a gap in his/her state of knowledge and wishes to resolve the anomaly”. When a specific situation or question is

addressed by an individual, then the needed information if available, accessed and used, contributes to answering the question or solving the problem. Ben-Haim (2006: 16) points out that the information gap can be a severe form of uncertainty and it rises up between what is known and what needs to be known in order to make fully competent decisions. Thus, information has the potential to reduce the uncertainty of the international students who study at the UKZN while also helping them to make sense of specific situations in which decisions have to be made or problems have to be solved (Cleaver 1987: 29).

1.6.3 Information seeking

Case (2002: 5) defines information seeking as “a conscious effort to acquire information in response to a need or a gap in your knowledge”. Whenever the person realises that there is an information gap in his/her state of mind, the willing point of bridging that gap comes in and it may lead to seeking and applying information from various sources. According to Ikoja-Odongo and Mostert (2006: 148) information seekers may take personal responsibility for their own information seeking processes or they may decide to work through an intermediary. The definition adopted in the study is that provided by Case above.

1.6.4 Information seeking behaviour

Davis (2000: 57) defines information seeking behaviour as “an activity of an individual that is undertaken to identify a message that satisfies a perceived need”. In other words, and in terms of approach adopted for this study, information behaviour describes “those activities a person may engage in when identifying his or her own needs for information, searching for such information in any way, and using or transforming that information” (Wilson 1999: 249). Therefore, the effort to satisfy the perceived need results in information seeking behaviour.

1.7 UKZN policy on international students

As noted above, international students on the Pietermaritzburg Campus form a large and arguably important population (over 866 in total for the 2011 academic year). The UKZN policy on international students is currently being revised in order to reflect the “new” institution. According to UKZN (2011b), besides the three campus international student offices (as indicated above; their roles are discussed in Chapter 2), there are also five supportive international relations offices centrally situated at the Howard College Campus which offer the following key services:

- ❖ The International Relations Office is responsible for providing leadership in key operations, in terms of academic collaborations linkages, marketing of UKZN to the international community and recruitment and enrolment of international students. In addition, the office has to ensure that the international students are provided with efficient and professional services.
- ❖ The International Advice Office is in charge of coordinating international visits for purposes of future collaborations and undertakes special projects for purposes of internationalising the university.
- ❖ The International Student Applications Office has the duty of ensuring that international students are assisted through the complete admissions process from enquiries, selection, acceptance, to registration. The office also assists and advises with assessment and evaluation of international credentials.
- ❖ The Student Exchange/Study Abroad Coordination Office has a responsibility for promotion and marketing of the student exchange programme to both local UKZN students and incoming international students. The office manages all aspects of the student exchange and study abroad programmes for both incoming and outgoing students.
- ❖ The International School and Short Term Programme Co-ordination Office deals with enquiries about international affiliation, liaises with schools hosting affiliates and supervises registration of international affiliates.

1.8 Methodology

This study combined the two main research approaches, namely qualitative and quantitative with the use of two survey instruments to gather data, namely a questionnaire (administered to international students) and an interview (with the Head of the ISO). These two instruments were deemed appropriate for gathering the data necessary for answering the research questions. The combination of two or more approaches of data collection procedures within a single study is known as methodological triangulation (Werner 2004: 28). The two approaches allow for more in-depth investigation of a situation and reinforce the collection of data for better analysis of research questions and increase the validity of the findings (Babbie and Mouton 2001: 275). Questionnaires to international students at UKZNP and an interview (with the Head of the ISO) were used as data collection instruments. The sample of 150 international students was identified via a non-probability sampling method namely snowballing. Babbie and Mouton (2001: 167) state that “snowball refers to the process of accumulation as each located subject suggests other subjects”. A total of 137 (91.3%) questionnaires were completed and returned by international students. The Head of the ISO was interviewed. The research methodology is described in detail in Chapter 3.

1.9 Study outline

The study comprises a further five chapters:

Chapter 2 puts forward the conceptual framework used for the study, namely, the Wilson’s (1999) model of information seeking behaviour. This chapter also provides a review of the literature related to the study.

Chapter 3 presents the research design and methodology. It, amongst other issues, discusses the approach adopted, the data collection procedures, and the validity and reliability of the instruments used in the collection of the data.

Chapter 4 presents the findings of the research as determined from the international students’ questionnaire and the interview with the Head of the International Student Office.

Chapter 5 discusses the results as presented in Chapter 4 in light of the literature review and the research questions underpinning the study.

Chapter 6, the final chapter, provides conclusions and recommendations for practice.

1.10 Summary of the Chapter

This chapter introduced the current study which is an investigation into the information needs and information seeking behaviour of international students at the Pietermaritzburg campus of the University of KwaZulu-Natal. It provided a statement of the problem with which the study was concerned, the background to the study and the key research questions asked. The key terms were clearly defined in order to avoid any ambiguity and confusion of the meaning attributed to each term used in the study. Delimitations and limitations of the study along with a brief historical background to the study were also provided. The structure of the study has been indicated as six chapters.

Chapter 2: Conceptual framework and literature review

2.0 Introduction

This chapter contains the conceptual framework of the study and the literature review. The latter covers scholarly studies related to information needs and information seeking behaviour of identified groups of people, namely, university students as a whole and then specifically, international students. The conceptual underpinning for the study was provided by Wilson's model of information behaviour and this is discussed. This discussion is followed by the identification of major sources of information used by international students and the challenges associated with doing so. Special attention is given to university library resources and services. Problems experienced by international students relating to their information behaviour are provided.

2.1 Conceptual framework

A theoretical framework influences how researchers design a study and how they collect and analyse the data (Understanding Research 2004: 143). Within the theoretical framework of information seeking, this study adopted the conceptual framework of information behaviour as represented by Wilson's model (1981). An investigation of information seeking concepts will lead to a better understanding of university students' information seeking behaviour in relation to existing information systems. Wilson (1999: 250) pointed out that the models and theories proposed by certain researchers, including but not limited to Wilson (1981), Belkin, Oddy and Brooks (1982), Ellis (1989), Kuhlthau (1991) and Derwin 1992, have gained strength as they have been adopted as the basis for further research by other scholars. For instance, reference is made to the theoretical framework developed by Belkin, Oddy and Brooks (1982), namely, the Anomalous State of Knowledge (ASK). This theoretical framework is useful in research investigating or assessing information needs.

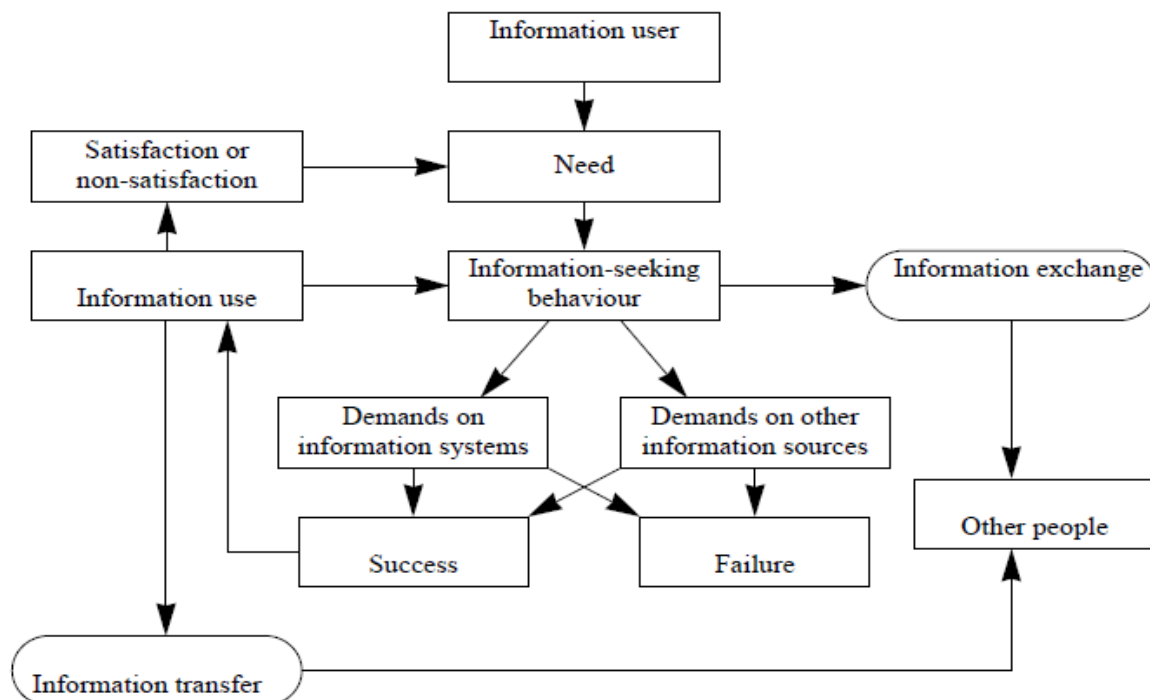
As pointed out, Wilson's (1981) model of information behaviour underpinned the present study. In this model, information need, information seeking, information exchange, and information use are integrated into a flow diagram. This model is based upon two key points.

First, the model looks at information need as a secondary need that arises out of a more basic or primary need; and second, during the process of discovering information to satisfy a need, the information seeker tends to meet with barriers of different kinds (Wilson 1999: 252). The barriers include, but are not limited, to personal, interpersonal, and environmental barriers.

Wilson’s model has been revised and updated over a period of time (from the 1981 model to the 1999 model). Wilson (1999: 251) indicated that the information seeker may or may not be successful at finding relevant information. If successful, the individual then makes use of the information found and may either fully or partially satisfy the perceived need. Failure to satisfy the perceived need mostly leads to reiterating the search process. Wilson (1999: 250) further described the model as “a framework for thinking about a problem and may evolve into a statement of the relationships among theoretical propositions”.

The researcher regards Wilson’s model to be more comprehensive and appropriate to the problem and population under study than other models (the reason for choosing Wilson’s 1999 model is provided below in the last paragraph of this Section 2.1). The diagram of Wilson’s (1999) model of information behaviour is provided below.

Figure 1 **Wilson's 1999 model of information behaviour**



Source: Wilson, T. D. (1999). *Models in information behaviour research*. Page 251.

Seyama (2009: 18) pointed out that Wilson's 1999 model illustrates that part of the information seeking behaviour may involve other people through information exchange and the information perceived as useful may be either passed to other people or used by the information seeker him or herself. The point does make sense for the purpose of this study given that the information seeking behaviour of international students on the Pietermaritzburg Campus of UKZN will inevitably involve different people and various offices where information can be obtained.

The reason for choosing Wilson's 1999 model is because it allows for a description and explanation of users' information behaviour. Wilson's model has been developed and updated (from the 1981, 1994, 1996, 1997 models to the 1999 model) and has been successfully applied by different researchers at different periods of time. For example, the model was used by Yang (2007), in his study of information seeking behaviour of international students for career decision making at the University of Tennessee. The model was also applied within the South African context by Mostert and Ocholla (2005) in their investigation of the information needs and information seeking behaviour of parliamentarians in South Africa. Specifically, the model was fruitfully used within the UKZN context by Seyama (2009) in her study of information seeking behaviour of students with visual impairments at the University.

2.2 Literature review

Wisker (2001: 129) argues that a literature review is an essential part of planning one's research and that it also helps develop one's own line of thought. More specifically, the review of related literature intends to situate the research within existing research, indicate where the present study fits into the broader debates, thereby justifying the significance of the study (Pather 2004: 72) and identify and fill gaps in the researcher's knowledge. In a similar vein, Terre Blanche, Durrheim and Painter (2006: 19) maintain that the purpose of a literature review is "to put your research project into the context by showing how it fits into a particular field".

The beneficial results of conducting a good review of related literature have been clearly highlighted by researchers Kaniki (2001) and Stilwell (2004). Stilwell (2000: 173) pointed

out that “ a good literature review needs to indicate the different views, agreements, disagreements and trends of thought on the topic of research and be accurately portrayed and acknowledged in the text”. The literature search involves the systematic identification, location and analysis of documents containing information related to the research problem (Gay 1976: 29).

In this literature review, the nature of the international student will be elaborated upon as well as an overview of the role of international student offices. Research into the information needs and information sources used by international students will be identified and the major problems experienced by them in terms of acquiring information will be outlined. This will be followed by a review of the scholarly studies on the information seeking behaviour of international students.

2.2.1 International students in the South African context

The potential benefits of having international students at universities in host countries are linked to skill migration, economic growth, public diplomacy and, more importantly, to research and innovation for a knowledge society (Daly 2011: 60).

Kishun (2007: 456) indicated that international student numbers in South Africa have more than quadrupled during the dozen years of democracy from around 12 500 in 1994 to nearly 53 000 in 2005 which represented more than 7% of the total higher education student body of 730 000. Interestingly, Schoole (2006: 10) noted that international students from Africa represented 82.1% of the total number of foreign students. Most students from the Southern African Development Community (SADC) countries were registered for undergraduate courses, while students from other African countries were mainly registered for postgraduate degrees. Students from the Southern Africa region were also drawn to higher education in South Africa on account of proximity, cultural and linguistic links, and quality of educational resources (Mpinganjira 2011: 2182). No major research has been undertaken in South Africa on the nature and needs of international students.

2.2.2 The role of the International Student Offices

Kishun (2006: 8) pointed out that “the responsibilities, positions and reporting of staff managing international offices differ from institution to institution”. Kishun (2006) added that South African universities had realised the necessity of increasing the number of international offices in order to correctly manage the influx of international students who entered South African higher education institutions after the 1994 democratic election.

UKZN has recognised the important role of the international office and, as mentioned, the University established three International Student Offices (ISOs) to serve all five campuses. The International Student Office is a department within Student Services. The Office on the Pietermaritzburg Campus provides a number of services to international students. These include applying for medical aid cover for students who do not come with such cover, study visa-permit applications and extensions. Other services provided include the receiving and sending of faxes and registered mail (free of charge) from or to home countries. Foreign exchange students are assisted with familiarization of the campus and surrounding areas and collection from the airport. In cases of death, the office helps with the relevant documentation to repatriate the late international students to their country of origin (Marais 2011).

2.2.3 Information needs of international students

Yi (2007), in his study of international student perceptions of information needs and use examines information needs of international students studying in the United States of America and whether education level, age and gender affected their information use. The study revealed that international students need information that supports their academic courses and those with a higher education level (postgraduate) use databases, remote access to library offerings and e-journals more frequently than international students with a lower education level (undergraduate).

The findings of the above study also indicated that international students have different language, educational, and cultural backgrounds, which in turn create a variety of information needs. These information needs were further grouped into four categories, such as:

- Information for solving academic problems for classes;
- Information for improving library skills;
- Information for improving English proficiency; and
- Information concerning software applications.

Leder and Forgasz (2004: 194) in their study of Australia and mature international students there found that for international students, information needs are consistently based on the differences in their home backgrounds and financial circumstances. Leder and Forgasz (2004: 196) added that international students tend to suffer from a lack of familiarity with the processes associated with the new academic environment in their host countries and lack of an immediate support network with their family members left behind in home countries. It is evident that international students have not only academic related information needs but they also look for information to resolve or meet their personal needs or social life issues.

2.2.4 Main sources of information used by international students

Case (2002: 12) acknowledged that one essential distinction that is made in the literature on information seeking is between “formal and informal sources of information”. Case (2002: 12) specified that formal sources refer to books, textbooks, dictionaries and encyclopaedias, while informal sources tend to be family, friends, and colleagues. In this context, the findings of the study investigating experiences of international students in New Zealand conducted by Ward and Masgoret (2004: 51) point out that “informal sources are seen as more readily available than formal ones”.

The research carried out by Abdoulaye (2002: 193) indicated that the formal sources of information that were mostly consulted for classes by African students studying in Malaysia, were library books, periodicals, textbooks, Internet, the Online Public Access Catalogue (OPAC), lecturers' handbooks and notes, librarians, online databases, and consulting colleagues. In addition, Yi (2007: 668) found that international students obtained the information needed mainly from the following sources: consulting librarians and classmates or friends, using the Internet, using library resources and services, and browsing online resources. Further discussion of some of the resources mentioned above follows below.

2.2.4.1 Library resources and services used by international students

The findings of the research conducted by Allen (1993) in his study of international students in academic libraries: a user survey focused on understanding the characteristics of international students and their library use, has provided a general picture of international students' perceptions of library use. The findings point out that being considered as a safe place to study was the main reason for international students using the library. The availability of the library's resources and services was the other factor accounting for its use. The latter use is perhaps unsurprising given the importance of the library in the academic endeavour and the use of both print and electronic resources by international students in this regard has been pointed out by Song (2004) and Majid and Kassim (2000).

In terms of library services, Abdoulaye (2002: 193) describes library services mostly used by international students at all levels of study (both undergraduate and postgraduate) as including circulation, photocopying and reference services. Interlibrary loan and online searching services are mainly used by postgraduate students particularly for their research projects. In a similar vein, Jackson (2005: 203) pointed out that some library services "such as interlibrary loan, librarian reference-by-appointment, and live online reference" are new to international students, "whereas services and concepts such as the reference desk and open stacks are understood".

2.2.4.2 Internet sources and electronic databases

As early as 1995, Bane and Milheim (1995: 1) maintained that the "Web is the largest electronic information resource in the world". Foley (2010) investigated the barriers faced by international students in their use of a small Irish academic library and the study revealed that resources used by international students to find information for class assignments included mainly Internet (Web) search engines used by 86.2% of respondents and books used by 60% of respondents. In comparison 'academic' electronic databases and E-books were used by a small percentage of the international students, namely, 20% and 26.2% respectively (Foley 2010: 37).

In the United States, Song (2004) in his comparative study on the information-seeking behaviours of domestic and international business students revealed that most of the international students initially do their information searching through either Google or Yahoo, whereas domestic students do their searching, in the main, from the library web page. Yi (2007: 669) indicated that “the search engines most used by international students were Google and Yahoo”. Song (2004) also highlighted that international students need to be educated about the fact that search engines such as Google and Yahoo do not search specialised and proprietary databases on which students can completely and totally rely.

2.2.4.3 Online Public Access Catalogue (OPAC) source

In terms of consulting the Online Public Access Catalogue (OPAC) as a source of information, Liao, Finn, and Lu (2007: 23) point out that “more international graduate students than American students find information in library books and the library online catalogue plays a more important role in international students’ information seeking”. In this regard, Tam, Cox and Bussey (2009: 358) highlight that “international students have quite specific needs from Online Public Access Catalogues”. Furthermore, in the next generation OPAC features could enable students to save their time, could be easy to use and relevant to their search (Tam, Cox and Bussey 2009). Abdoulaye’s (2002: 193) findings underscore the importance of the OPAC as well as it was the most highly used information source or channel for African Masters’ and PhD students studying in Malaysia when searching for books and journals relating to their research projects.

2.2.4.4 Librarians, lecturers and colleagues

Neerpath, Leach and Hoskins (2006: 61) point out that it is important that librarians understand the general interests of the academic institution and meet the specific needs of each patron. Jackson (2005: 205) argues that “librarians can provide a solid foundation for international student success by developing and increasing library efforts and programs for this target group”. In this regard, Kumar and Suresh (2000: 333) suggest that “Having one contact person who . . . is perceived as approachable and interested in (international students)

will go a long way towards improving communication, and building a positive relationship between the library and the international student body”.

Lecturers and colleagues as sources of information were also consulted by African students while they were studying in Malaysia (Abdoulaye 2002: 193). Lecturers were consulted during class time and even after class or seminar sessions for more explanation, for example, in understanding an assignment topic. In addition, Lewthwaite (1996: 183) maintains that international students are assisted by academic and staff support, for instance, supervisors, and mentors but hostel administrators also support international students.

2.2.4.5 Offices used by international students

Ward and Masgoret (2004: 44) in their study investigated the experiences of international students in New Zealand. They point out that international students frequently use university-based offices and these offices include counselling, sport union, health and funding centres, housing office and international student office.

2.2.5. Major problems experienced by international students

International student groups have been a focus of study for many researchers over the last decade (Liao, Finn and Lu 2007; Hughes 2005; Wang and Frank 2002). The researchers have identified, in the main, three major barriers experienced by international students with regard to acquiring information, namely, language and communication issues, cultural issues and information literacy skills (Onwuegbuzie 1997; Song 2004). Other problems identified include library anxiety, communication problems, social and personal uncertainties (Burns 1991; Brown 2000; Baron and Strount-Dapaz 2001).

Dunne (2009: 226) found that host students, interestingly, perceived international students to be more engaged with the academic subject matter, having a strong work ethic, and having comprehensible goals and objectives for their educational experience. Indeed, in terms of responsibility, international students work under greater pressure than host students. These

include pressures to succeed academically, financial pressures to pay high tuition fees and to meet the high cost of living in host countries and, finally, family pressures (Dune 2009: 227).

2.2.5.1 Language and communication issues

Language skill in this study refers to the skill in writing, reading, speaking and listening in English, which is the foundation of effective communication in the university context. Foley (2010: 10) indicates that “most international students come from countries where English is neither an official language nor a medium of instruction”. According to Bilal (1989) in his study based on international students’ acquisition of library research skills in relation to their English language proficiency, he revealed that international students with English as their second language had half the reading comprehension of home students and even poor oral comprehension skills. As far as the present study is concerned language may either be an open door for students who have the language proficiency to easily communicate or it can be a barrier of communication to those who are still struggling with it. What makes English particularly difficult for foreign students is because for some of them English is not only the 2nd or 3rd language but it may even be their first time to communicate in English regularly.

The study recognises that English is the official language of instruction at UKZN and that it is not, as noted above, the first language for the majority of international students (or even local students) enrolled at UKZN. This can negatively influence communication, searching and learning between international students and the University system which in turn can impact on information related issues. In response, UKZN has initiated access programmes to assist those host students who come from disadvantaged schools, and those international students who come from countries where English is neither an official language nor a medium of instruction in order to improve their academic understanding and, importantly, their English language skills.

2.2.5.2 Cultural and financial issues

International students are expected to adjust to a new country's education and cultural dimensions (Baron and Strout-Dapaz 2001). Mu (2007: 573), for example, states that "cultural and communication differences make international students uncertain about the subject resources and services available in a library." However, studies focussing on intercultural contexts in higher education have revealed that international students wish and expect to have contact and build up friendships with host students (Ward, Bochner and Furnham 2001; Smart, Volet and Ang 2000) and that contact and friendships can contribute to the good academic performance and prompt socio-cultural adaptation of international students (Kudo and Simkin 2003).

Brux and Fry (2009: 521) in their study of interests, issues and constraints of multicultural students studying abroad have highlighted finances as the main constraint faced by international students. This could be applicable to international students at UKZN as well given that it is more expensive for foreign students to study here and there are different financial deadlines to meet. (See the UKZN website in this regard at www.ukzn.ac.za.)

2.2.5.3 Information literacy issues

Siddiqui (2011: 57) states that "today information technology has developed rapidly and has had a huge impact on access to information and on information seeking behaviour". Generally, information literacy skills include knowledge about and the ability to use information and communication technology (ICTs). International students come from different countries, some of which are developed whilst some are developing countries. Therefore, their level of ICT knowledge and skill and exposure to such formats and resources is varied and this can influence their ability to easily access information.

The survey conducted on factors that influence information seeking behaviour of students by Korobili, Malliari and Zapounidou (2011) highlighted the need for improving the level of graduate students' information literacy skills. In this context, Mu (2007: 575) suggested information programmes that could develop information literacy skills of international

students for their academic purposes, and these included: library orientation which can help familiarise them with the library environment; library resource introduction; searching the library catalogue; locating information using a range of print and electronic resources; information retrieval skills; critical skills for evaluating information retrieved; proper citing; and providing follow-up sessions.

2.2.6 Preferred information format

Liao, Finn and Lu (2007: 11) noted that students prefer using electronic resources rather than print-based ones. They further identified the key factors that have influenced both international students and American students while making the choice of electronic format over print. Students, for example, considered accessibility as a more important factor than stability. Online resources were seen as allowing flexible access and electronic resources also provided a full-text searching facility. It must be noted that the authors did not differentiate the preferences of international students from those of the host students and it is assumed that the findings applied similarly to both sets of students.

2.2.7 Initiatives to improve information services

In terms of supportive initiatives, the orientation programme offered by universities, including UKZN, at the beginning of the academic year is a helpful introduction to academic and social-life expectations of international students (Lewthwaite 1996: 175). In other words, Ward and Masgoret (2004: 48) strongly suggest that “institutions need to initiate more thorough and comprehensive strategies for disseminating information to international students” and a result of this initiative can help to keep international students aware of the services designed for them.

2.2.8 Studies on information seeking behaviour of international students

The literature search revealed that a limited number of studies have been conducted in South Africa concerning information needs and information seeking behaviour of international students in tertiary institutions (see below for discussion of these studies). The number of relevant international studies is also limited (see, for example, Song 2004; Abdoulaye 2002; Hughes 2005 and Jackson 2005). It is evident that many of the studies are library focused and secondly, that there is a need for further research in this area at both a national and international level. It is also evident that problems faced by local students may mirror those faced by international ones with regard to needs and information seeking behaviour (Hughes 2005: 172).

Liao, Finn and Lu (2007) explored the process involved in information seeking behaviour of international graduate students versus American graduate students and the information seeking process was divided into three stages, namely, initiating, searching and locating stages.

The purpose of the initiating stage was to identify the exact starting point of the information-seeking process for each student. Almost 50% of international students indicated they initiated searching from the Internet. Their second choice (16.5%) was electronic resources (including electronic journals, databases, and electronic theses and dissertations), while 40.6% of American respondents tended to search electronic resources first.

In the searching stage most online resources are accessed via the Internet (WWW), (the Internet was the most frequently used information resource by international students). The study found that the top two favourite web searching tools were search engines and online reference tools. In addition, the three least favourite tools used by international students were Web directories, online discussion forums, and weblogs.

In the locating stage research shows that the top three information sources for international students were journals, library sponsored e-resources, and library books. The study indicated that both groups of respondents preferred electronic formats over print resources because the former permitted more flexible access (a characteristic of electronic formats mentioned above).

As indicated below, other studies have been carried out on the information seeking behaviour of international students at UKZN. As with the current research, these studies went beyond the library situation and highlighted information needs and behaviour in the University context as a whole. These studies were conducted at the Post-graduate Diploma level, not the masters or PhD level, and were small in scale. The most common finding of these previous studies was the information gap between the University administration and the international students as information seekers. An example in this regard was the lack of information regarding the extra charges that international students had to pay in terms of a student service levy of R 1 800 per annum. Other important findings of the studies are highlighted below.

Chisa (2004) and Muhambe (2009) in their research found that the “best” source of information on campus for international students was colleagues, especially for academic purposes. They both highlighted that academic information was the prime information required by the international students who study at UKZN.

Essentially, information seeking situations related mainly to academic needs for 77% of international students whilst the remaining 23% highlighted personal issues (Mkhwebu 2008: 10). In addition, the major sources used to satisfy academic needs were dominated by discussing with classmates (53.3%), consulting lecturers (20%) and using library facilities (16.6%) as opposed to interacting with friends for personal needs reported by (40%) of the respondents (Mkhwebu 2008: 11).

Asah (2000) and Chisa (2004) in their research identified as a key problem the perception held by a large number of international students, that preferential attention was likely to be given to international students who were part of the University’s exchange programmes.

Accommodation was also identified by students in these studies as a problem. However, the extent of the problem did tend to vary in each of the studies. Both Asah (2000) and Chisa (2004) found that 24% of the students surveyed identified it as a problem, whilst the percentage was 6% of students in the study done by Letsoalo (2006) and, finally 13% in Muhambe’s (2009) research.

The other main problems identified during previous studies were poor library guidance and the lack of ability for searching and retrieving online information via online databases on the Internet (Chisa 2004 and Muhambe 2009).

Muhambe (2009) emphasised that due to the large number of international students at UKZNP, there was a need to further investigate their information needs and information seeking behaviour more fully, a need which this study is responding to.

2.3 Summary of the Chapter

This chapter presented the conceptual framework for the study, namely, Wilson's model of information behaviour and its appropriateness was outlined. In the review of the related literature which followed, the nature of the "international student" was discussed as was the role of international students. Research into the information needs of and the information sources used by international students in different contexts was identified. Library resources and services were the main focus of many international studies. This was followed by a discussion of the problems faced by international students; in particular, language and communication problems were highlighted together with information literacy, cultural and financial issues. The chapter ended with a review of the few studies which have been undertaken on the information seeking behaviour of international students at UKZNP. These studies have been conducted at the Post-graduate Diploma level and were small in scale. Where applicable, relevant points clarified in the literature review will be considered in the interpretation and discussing of the research findings.

Chapter 3: Research methodology

3.0 Introduction

Chapter 1 described the background of the study, the research problem as well as the purpose and research questions of the study. This description was followed by the conceptual framework and the literature related to the study presented in Chapter 2. Chapter 3 presents the research methodology that was used to address the research problem and to answer the research questions. This chapter includes the design of the study, the choice of method, population, sampling, data collection instruments and methods used for data analysis. Validity and reliability considerations followed. The research instruments adopted were that of a questionnaire and an interview due to the nature of the problem under investigation.

3.1 Research design

A research design is a plan or blueprint of how a researcher systematically collects and examines the data required to answer the research questions (Babbie and Mouton 2001: 74). This view is shared by Terre Blanche and Durrheim (1999: 29) who describe a research design as a strategic framework for action that serves as a bridge between research questions and the execution or implementation of the research. Therefore, “designing a study involves multiple decisions about the way in which the data will be collected and analysed to ensure that the final report answers the initial research question” (Terre Blanche, Durrheim and Painter 2006: 35). Kothari (2004: 5) states that “qualitative and quantitative are the two basic paradigms of research”. These two paradigms or approaches were investigated in order to determine an appropriate methodological approach to apply in the study. Research methodologies revolve around two major approaches, namely qualitative and quantitative (Creswell 1994b: 1). Both qualitative and quantitative approaches were applied in this research.

Glesne and Peshkin (1992: 7) state that the purpose of using a qualitative approach is to contextualize and interpret results using induction to derive possible explanations based on observed phenomena while the quantitative approach involves collecting numerical data that

can be counted. The quantitative paradigm has provided a significant part of the foundation upon which the social sciences have been erected (Locke, Silverman and Spirduso 1998: 124). Basically, quantitative research makes sense in situations where we know in advance the important variables and when we are able to know how to control and measure them. But in situations where we find it is difficult to identify the important variables and how to measure them, we need to engage in the kinds of open-ended, inductive exploration made possible by qualitative research (Terre Blanche, Durrheim and Painter 2006: 272).

Gummesson (2000: 18) notes that the concept of the qualitative approach was brought to the fore by Thomas Kuhn, in the early 1960s, and can be used to represent "people's value judgments, norms, standards, frames of reference, perspectives, ideologies, myths, theories, and approved procedures that govern their thinking and action".

The study focused on obtaining qualitative information as well as statistical data concerning the information needs and information seeking behaviour of international students. Data collection techniques which were used in the study were a semi-structured interview and survey questionnaire. The two units of analysis used in the study were the international students and the Head of the International Students Office, both on the Pietermaritzburg Campus.

3.2 Choice of method

The combination of two or more methodologies in a single study is described by Babbie and Mouton (2001: 257) as methodological triangulation which may lead to more valid and reliable findings; and such triangulation can overcome the potential bias and sterility of single method approaches (Hussey and Hussey 1997). When used in combination, both qualitative and quantitative data yield a more complete analysis, and they complement each other (Creswell, Fetters and Ivankova 2004). The application of qualitative and quantitative methodologies to a research problem was applied and the resultant benefits from triangulating qualitative and quantitative methodologies were evidenced (Mangan, Lalwani, and Gardner 2004: 567).

Sarantakos (1998: 168) describes the main reasons for using triangulation. These include: to obtain a variety of information on the same issues; to use the strengths of each method to

overcome the deficiencies of the other; and to achieve a higher degree of validity and reliability. In addition, many studies advocate methodological triangulation because on the one side it bridges issues of reliability and validity, and on the other side, it contributes to better understanding of the problem (Glesne and Peshkin 1992).

The current study employed the survey method. Neuman (2009: 144) notes that “surveys are the most widely used data-gathering technique in the social sciences and other fields”. Surveys are concerned with collecting data directly from people about instances in varying situations and circumstances (Robson 1993: 49). The survey method is characterised as either cross-sectional or longitudinal (Schutt 1996: 130). A longitudinal survey is used when one intends to describe change over time. On the other hand a cross-sectional survey focuses on the state of affairs in the population at just one point in time. The present study adopted a cross-sectional approach. The survey method was used in the current research as it best suited the nature of the research problem under investigation. This method was also deemed most suitable for gaining access to the international students. Furthermore, the survey design was chosen because it is economical, in the sense that it enables the researcher to gather information on a one-off basis in order to define the nature of existing conditions (Simba 2006: 52). It is also noted that survey research is very popular in South Africa (Babbie and Mouton 2001: 231).

Babbie and Mouton (2001: 263) acknowledge that surveys have special strengths and weaknesses which the researcher should take into account when deciding the appropriate research method. Strengths include: surveys are particularly useful in describing the characteristics of a large population; surveys make large samples feasible; and standardized questionnaires have an important strength with regard to measurement generally. Weaknesses include: standardized questionnaire items often represent the least common denominator in assessing people's attitudes, or orientations, circumstances, and experiences; surveys cannot measure social action; and they can only gather self-report of recalled past action. In terms of the present study the researcher was of the opinion that the strengths of the survey outweighed the weaknesses and as such the survey was an appropriate method for the problem investigated.

3.3 Research population

Ngulube (2003: 201) defines the population of a study as “a set of objects, whether animate or inanimate, which are the focus of the research and about which the researcher wants to determine some characteristics”. According to Babbie and Mouton (2001: 173) a population is defined as “the theoretically specified aggregation of study elements”. In addition, Busha and Harter (1980: 57) define population as “any group of persons, objects or institutions that have at least one characteristic in common”. The latter definition is more appropriate for this current research in the sense that international students represent a group of persons who have a common characteristic of being foreigners and studying at the same university (UKZNP). In social science research what or who is studied is more precisely called the units of analysis. Welman, Kruger and Mitchell (2005: 25) define units of analysis as “those elements we examine in order to create summary descriptions of all such units and explain differences among them”. According to Babbie and Mouton (2001: 84) the unit of analysis refers to “what of your study: what object, phenomenon, entity, process, or event you are interested in investigating”. As noted above, two different populations were targeted for this research, the international students and the Head of the International Student Office.

3.3.1 Population size

Babbie and Mouton (2001: 174) define the study population as “that aggregation of elements from which the sample is actually selected”. There were 866 international students registered in the 2011 academic year on the Pietermaritzburg Campus (Marais 2011). Ngulube (2003: 201) points out that depending on the size of the population and the purpose of the study, a researcher can study the whole universe or a subset of the population. Commonly, the whole population tends to be studied should it total less than 100 (Leedy 1997: 211). In this regard, Powell (1997: 67) states that “a study of a whole population is referred to as a census”. Given the large size of the population in the present study, a census was not an option and sampling was deemed necessary.

The participants comprised both undergraduate and postgraduate international students who were registered in all faculties. They either fell under the University exchange programmes

(there were 38 such students for the first semester and the registration for second semester was still taking place) or belonged to the normal degree programmes (of which there were 828 students).

3.3.2 Sample

Gravetter and Forzano (2009: 144) define sampling as “the process of selecting individuals to participate in a research study”. Saunders, Lewis and Thornhill (2003: 151) state that sampling provides a valid alternative to a census when there are budget constraints, time constraints or when it seems impractical to survey the entire population. Krejcie and Morgan (1970) point out that with a population size of 850, the sample size would be 265. However, due to the limited financial resources, time constraints and the nature of the MIS Coursework thesis a smaller sample size of 150 students was targeted as being manageable and it was this number of students who were approached. It is acknowledged that reducing the sample size would have an impact on the generalizability of the results. As Newell (1993: 96) points out “a sample size should not be very small because it would not be possible to generalize about the results of the study”. It is also acknowledged that the non-probability sampling method adopted (see below) also had implications for the generalizability of results (Gravetter and Forzano 2009: 152) and as a consequence being able to argue that the findings are representative of the population of international students registered at UKZNP cannot be done with any certainty.

To overcome the challenge of a possible low response rate associated with questionnaire based surveys (Neuman 2009: 168) the researcher contacted the population to inform them of the study before the questionnaires were distributed. The 150 students were identified via a non-probability sampling method namely, snowballing, and this was used to reach the targeted sample size. Babbi and Mouton (2001: 167) state that “snowball refers to the process of accumulation as each located subject suggests other subjects”. The Head of the International Student Office was also interviewed.

An effort was made to ensure that both undergraduate and postgraduate students were represented as well as those on exchange programmes and those registered for degree purposes. In order to identify and gain access to the international students, use was made of

the various student associations or clubs, based on their countries of origin which all international students belong to. Contact was made with the chairpersons of these clubs and international students were contacted with the assistance of the chairpersons. Once students had been contacted they were asked by the researcher to recommend other international students who they knew. Students who fell under the exchange programme category were identified with the assistance of the Student Housing Division. Such students are accommodated in the various university residences.

The snowball approach was very useful for this research because it allowed the researcher to reach a targeted sample quickly which would under normal circumstances have been a slow process (to identify international students among other university students). Efforts were made to ensure that the proportion of students in terms of year of study, gender and country of origin reflected as much as possible that of the whole population but as mentioned above generalizability of the results cannot be assumed. One of the reasons for doing so is the possibility that first year international students, for example, may have information needs and information seeking behaviour that differ from those of the more senior international students at UKZN.

3.4 Data collection instruments

Terre Blanche and Durrheim (1999: 45) point out that “data is basic material with which researchers work”. In the study, data collection instruments comprised a self-administered questionnaire and a semi-structured interview. The questionnaires were delivered to respondents (international students) by hand, and wherever possible, respondents were asked to complete the questionnaire immediately. If this was not possible, arrangements were made to collect the questionnaire at a later date.

3.4.1 Semi-structured interview

Conducting an interview is a more natural form of interacting with people than making them complete a questionnaire (Terre Blanche, Durrheim, and Painter 2006: 297). Holstein and

Gubrium (2003: 176) define an interview as “an in-depth conversation between participants and the researcher”. The most popular kind of interview is a semi-structured one, where the researcher develops an interview schedule in advance (Terre Blanche, Durrheim, and Painter 2006: 298) and this was applicable to the present study.

3.4.1.1 Advantages of the semi-structured interview

Humphrey and Lee (2004: 289) indicate that the semi-structured interview provides some advantages including allowing “the interviewees a degree of freedom to explain their thoughts, to highlight areas of particular interest and expertise that they felt they had, as well as to enable certain responses to be questioned in greater depth”.

The semi-structured interview with the Head of the International Students Office was recorded via a tape recorder (once permission to do so was granted by the Head). Nachmias and Nachmias (1982: 153) stressed that social science data are obtained when investigators record observations about phenomena being studied, or have the observations recorded for them. Terre Blanche, Durrheim, and Painter (2006: 298) have also pointed out some advantages of recording, namely: recording allows the researcher to keep a full record of the interview without having to be distracted by detailed note-keeping and it also shows the interviewees that the researcher takes seriously what they say. The interview was conducted in a face-to-face setting which is the most common method of collecting interview data (Babbie and Mouton 2001: 249). The interview schedule consisted of 13 questions (Appendix 4) and the Head of the International Student Office was requested to provide an explanation of certain matters, as full as possible.

3.4.1.2 Disadvantages of the semi-structured interview

The semi-structured interview also has some disadvantages. Babbie and Mouton (2001: 249) maintain that “most face-to-face interviews require more than one interviewer, although you might undertake a small scale interview survey yourself” (which the present study did). Cone and Foster (1998: 20) indicate that the semi-structured interview highly depends on the skills

of the interviewer. However, Babbie and Mouton (2001: 289) highlight that sometimes the interviewer puts the respondent (interviewee) under pressure to look good and sometimes the question is asked in a particular context that omits the most relevant answers altogether.

3.4.2 Self-administered questionnaire

Ngulube (2003: 205) highlighted that questionnaire surveys are the most used research method available to the social scientists interested in collecting primary data for describing a population too large to observe directly. Surveys are mostly used in studies that have individuals as the units of analysis, as does this current study.

Through the use of the questionnaire, critical incidents experienced by international students were explored. According to Case (2002: 105) a critical incident technique “examines a memorable information seeking episode”. The questionnaire designed by Kaniki (1995) used such a technique and it has also been successfully applied in other studies. All questionnaires were in English as the language which is commonly used on the Pietermaritzburg Campus.

3.4.2.1 Advantages of the self-administrated questionnaire

One of the advantages of a questionnaire is that when carefully constructed and standardized it provides data in the same form from all respondents (Babbie and Mouton 2001: 232). Another advantage is that the self-administered questionnaire can be completed with or without the researcher being present (Lewis-Beck 1994: 3) and this was applicable to the present study as indicated above. Powell (1997: 84) maintains that questionnaires facilitate accessibility and collection of large amounts of data and information in a short period of time and they are not expensive to administer. Babbie and Mouton (2001: 232) argue that self-administered questionnaires allow the researcher to achieve a higher response rate with a literate population which has a recognizable address. Especially when the questionnaire is appropriately worded, it can produce sufficient and relevant information for the benefit of the study.

3.4.2.2 Disadvantages of the self-administrated questionnaire

Kothari (2004: 113) points out that self-administrated questionnaires have limitations due to the fact that respondents must be able to read the questions, understand and answer them. In order to prevent this issue, all questionnaires were designed in the English language, the official language used at UKZN, Pietermaritzburg Campus. Neuman (2000: 259) highlights that “if the respondents are not interested in the topic, the response rate would tend to be lower, since there is no one to make follow up” (in the present study the purpose of the study was explained to respondents before they completed the questionnaire). It was an advantage to personally hand the questionnaires to the respondents and, if necessary, answer any queries they might have had. In addition, Neuman (2000: 273) also points to “the cost involved in terms of money and time consumed while the researcher is sending reminders in the form of letters or phone calls”. But as indicated above, this was not an issue in the present study because most questionnaires were collected immediately and only a few of them were collected at a later date.

3.4.3 Forms of questions

Powell (1997: 126) maintains that survey questions can be either forced choice (closed) or open-ended questions. Both types of questions were used in the questionnaire. The two types of questions are briefly discussed below.

3.4.3.1 Open-ended questions

Open questions are defined as those questions that allow individuals to respond in a way they wish to (Powell 1997: 127). Ngulube (2003: 211) highlights that “open-ended questions give the respondents opportunity to explain their opinions without being limited by predetermined responses”. Open-ended questions allow the respondents to be free to express their thought and feelings in their own words. Busha and Harter (1980: 70) highlight that this freedom allows the researcher to elicit the respondents’ views on the topic under study. Heather and

Stone (1985: 21) maintain that “open-ended questions produce responses that can be included in a research report to make the report more interesting”. Therefore, open-ended questions were used in the questionnaire where the range of choices could not be predetermined.

3.4.3.2 Closed questions (forced choice)

Babbie and Mouton (2001: 233) point out that with closed or structured questions, the respondent is asked to select an answer from among a list provided by the researcher and they are very popular because they provide a greater uniformity of responses and are more easily processed. Additionally, when the relevant answers to a given question are relatively clear, this should lead to better understanding. Closed questions are valuable, especially in a large sample and the results of the investigation can be available fairly quickly (de Vos 2002: 179).

Babbie and Mouton (2001: 234) indicate that in the construction of closed questions, the researcher should be guided by the two structural requirements, namely, the response categories provided should include all the possible responses that might be expected and the respondents should not feel compelled to select more than one unless the question specifically requires it.

A disadvantage of closed questions is that respondents may be forced to select inaccurate answers (Powell 1997: 95). On the other hand, advantages of closed questions are that responses can easily be entered in a computer, saving time and money and they are less time-consuming for the respondents to complete (Newell 1993: 101). Closed questions were used in the questionnaire where the responses to questions were regarded as straightforward. Respondents were also given an “other” option in some of those questions.

3.4.4 Content of questionnaire used in the study

The questionnaire comprised three sections with 27 questions in total (Appendix 2). The sections were as follows:

Section 1 determined the background information of the respondents such as gender, age, respondent's country of origin, home language, English language problems as well as English is official language used at the UKZN, level of study and residence.

Section 2 sought to obtain data related to information needs and information seeking behaviour of international students. As this section was dealing with the major part of the study, it was divided into two subsections: Subsection A collected information concerning the information seeking situations in relation to academic needs of international students. Subsection B collected information concerning the information seeking situations in relation to personal needs of international students.

Section 3, the final section, investigated information related to the International Students Office and its information service delivery. This section also gathered respondent's views and additional comments.

3.4.5 Pre-testing of questionnaire

Powell (1997: 105) states that pre-testing allows the researcher to identify questionnaire items that tend to be misunderstood by the respondents and hence lead to the omission of information that is needed. Babbie and Mouton (2001: 244) maintain that there is always a possibility of error, regardless of how carefully the researcher designed the questionnaire. In order to overcome all possible shortcomings when administering the questionnaire, the researcher pre-tested the questionnaire before administering it to the respondents. Pre-testing plays an important role in maximizing the reliability and validity of the data collection instruments (Ngulube 2003: 215). The questionnaire was pre-tested on three international students enrolled in the normal degree programme and one international student enrolled in the university exchange programme. Questionnaires were hand-delivered to the four international students and three of them were collected immediately after completion, one was collected after an interval of two days.

Czaja and Blair (2005: 24) maintain that "the pre-test results should be used to improve the study and implementation plans". In other words, the pre-test provided the outcomes that helped the researcher to improve the questionnaire. For instance, question 2 asked the respondents their age. Three of the four pre-test participants did not answer this question

refusing to give their exact age. As a result, the researcher changed this question by asking respondents to indicate which age range (category) they fell into and this was deemed acceptable by respondents. Another example refers to question 23 of the questionnaire which was presented in the form of a table after pre-testing the questionnaire. The modification of this format was done with the aim of separating each independent element of this question thereby making it clearer and simpler for the respondents to answer. In addition, minor editorial and grammatical changes were made. Copies of the questionnaire were then made and administered to the study population.

3.4.6 Administering the questionnaire

As noted above questionnaires were hand-delivered to respondents who had been initially identified via the chairpersons of the various international student associations or clubs. As mentioned questionnaires were, in the main, completed immediately. Where this was not done, arrangements were made to collect the completed questionnaires at a later date (within two to four days). Distribution of the questionnaires was done during a three week period in the second half of the second semester of 2011. As mentioned above, the exchange students were identified with the assistance of Student Housing and these respondents were contacted at their place of residence in the presence of the Residence Assistants.

3.4.7 Response rate

Babbie and Mouton (2001: 261) maintain that a response rate of 50% is adequate for analysis and reporting, while response rates of 60% are good and 70% are very good. Williams (2003) points out that a response rate of 20% for a self-administered questionnaire is sufficient for reporting and analysing findings. Of the 150 copies of questionnaires distributed, 137 were completed and returned thus yielding a very good response rate of 91.3%. The difference (8.7%) of not returned questionnaires resulted from those few respondents who preferred to complete and submit the questionnaires at a later date (as indicated above) and who did not do so.

3.5 Data analysis

Rose and Sullivan (1993: 4) defined data analysis as the practical application of formal mathematical procedures to the analysis of social science data. In order to start the process of data analysis, the researcher needs to put the collected data in a different form to what it was when it was collected (Neuman 2000: 134). This is known as coding. Before doing so each completed questionnaire was evaluated to check for missing data and ambiguity and errors in the responses. The questionnaire responses were then coded and entered into the computer for subsequent processing using the statistical program SPSS. As Bell (1999) points out the program is useful for generating descriptive and frequency tables – a form of data presentation which was mostly used in the present study.

Coding of the responses to closed questions is relatively straightforward. It is less so with responses to open questions. Content analysis according to Powell (1991: 164) is the “best” approach to adopt in this regard. Content analysis was thus used to interpret the responses to the open questions in the questionnaire and the interview. Babbie and Mouton (2001: 492) point out that “content analysis is usually divided into two types, namely relational analysis and conceptual analysis”. The latter was used for this study. More specifically, it involves reading and re-reading one’s texts (responses), and trying to make sense of the patterns and themes that emerge from one’s data (Babbie and Mouton 2001: 493). Through the process of content analysis meaningful response categories for the responses to the open questions in the questionnaire were created (Saunders, Lewis and Thornhill 2003: 380). The response categories were coded thus allowing for computer input and subsequent processing of the responses.

3.6 Reliability and validity: evaluation of the method used

It is necessary to evaluate a research method in order to determine whether it successfully measured what it intended to measure or not. Evaluation of the method requires assessing the reliability and validity of the research method used (Gravetter and Forzano 2009: 75).

Ngulube (2005: 136) defined reliability “as the degree to which a particular technique consistently measures what it sets out to measure while yielding the same results each time”.

Terre Blanche and Durrheim (1999: 61) indicated that “validity refers to the degree to which research results are sound”. According to Neuman (2000: 171) reliability is a necessary precondition of validity. One of the most common ways of helping to ensure validity is through conducting a pre-test of the research instruments. As mentioned above, the questionnaire was pre-tested and the formulation of questions was reviewed for clarity and simplicity in relation to the research questions (Baker 1988: 19). Doing the pre-testing in advance (Babbie and Mouton 2001: 244) eliminated ambiguity and created the opportunity to maximize the validity and thus the reliability of the research instrument (Ngulube 2003: 215).

3.7 Summary of the Chapter

This chapter covered the methodology used in this study. The data of the study were collected using both quantitative and qualitative methods, namely, a self-administered questionnaire and interview schedule respectively. The chapter discussed the use of the survey method and the advantages and disadvantages of the method. The types of questions asked were outlined. The population was described and the use of the snowball sampling technique was justified. The pre-test of the questionnaire was discussed and this was followed by a brief description of how the questionnaire was administered. It was noted that a very good response rate of over 90% of the targeted sample of 150 was achieved. The Chapter ended with a brief discussion of the analysis of the data and an evaluation of the research method in terms of reliability and validity. The findings of the study are presented in the next chapter, Chapter 4.

Chapter 4: Research results

4.0 Introduction

Chapter 4 presents the research findings (data presentation). The results were drawn from the self-administrated questionnaire given to the international students and a semi-structured interview with the Head of the International Student Office at UKZNP. The purpose behind each question that was asked is explained and the results are provided.

4.1 Response rate

Of the 150 copies of questionnaires distributed to the identified international students, 137 were returned yielding a response rate of 91.3 %. Considering the sample size of 150 international students, this high response rate is explained by the various measures undertaken to ensure participation as mentioned in Chapter 3. In each instance below, the symbol N indicates the total possible number of respondents that should have answered a particular question. The Head of the International Student Office at UKZNP was interviewed as indicated in Chapter 3.

4.2 Questionnaire results

The questionnaire designed for international students had three main sections as described in the previous Chapter. It must be noted that questions 6, 7, 12, 14, 17, 19, 22, 24, 25, 26 and 27 were open ended questions that allowed respondents to provide multiple responses. Figures are rounded-off to one decimal place.

Section 1

4.3 Background information

Ten questions in the questionnaire were designed to collect background information on the participants. Questions 1 to 4 were designed to provide demographic information. Questions 5 to 7 focussed on the use of English as an official language at UKZN. Finally, questions 8 to 10 obtained information on the category and programme of study of each respondent as well as where the respondents resided. The background information on the respondents enabled the researcher to gain a clear image of the population under study.

4.3.1 Gender and age

The information in this section deals with the gender and age range of participants. In questions 1 and 2 respondents were asked to specify their gender and age. The results are provided in Table 1 below.

Table 1 Gender and age distribution

N=137

		Age categories						Total
		18-22	23-27	28-32	33-37	38-42	43+	
Gender	Male	22 27.8%	36 45.6%	11 13.9%	5 6.3%	1 1.3%	4 5.1%	79 100%
	Female	26 44.8%	16 27.6%	7 12.1%	6 10.3%	2 3.4%	1 1.7%	58 100%
Total		48 35.0%	52 38.0%	18 13.1%	11 8.0%	3 2.2%	5 3.6%	137 100%

Of the 137 international students who answered the questionnaire, a slight majority, 79 (57.7%) were male and 58 (42.3%) were female. Table 1 shows that a majority of the respondents (100 or 73%), were from the age groups 18-22 and 23-27 years. The highest number of international students who responded to the questionnaire was between the ages of 23-27 at 52 (38%). The age group of 18-22 years with 48 (35%) respondents was second highest. The lowest number of respondents three (2.2%) and five (3.6%) were those in the categories 38-42 and over 43 years respectively. The findings revealed that the most common age group for males was 23-27 at 36 (45.6%) and the least common age category was 38-42 with one respondent (1.3%). The most common age group for females was 18-22 at 26 (44.8%) and with the least common age category being over 43 years at one (1.7%).

4.3.2 Respondent's country of origin

Table 2 below reflects the numbers of respondents based on their country of origin. Table 2 indicates that the highest number of international students who responded were from Zimbabwe with 56 (40.9%) and those from Rwanda with 17 (12.4%). This was followed by students from Nigeria with nine (6.6%), Lesotho and United States of America (USA) with 7 (5.1%) each, followed by Swaziland and Tanzania with 6 (4.4%) each. Hereafter, the findings showed that the lowest number of respondents was characterised by one respondent from each of the five following countries: Angola, Cameroon, Ethiopia, Ghana and Mozambique.

Table 2 Country of origin

N=137

Country	Frequency	Percentage
Zimbabwe	56	40.9%
Rwanda	17	12.4%
Nigeria	9	6.6%
Lesotho	7	5.1%
USA	7	5.1%
Swaziland	6	4.4%
Tanzania	6	4.4%
Kenya	5	3.6%
DRC	4	2.9%
Burundi	3	2.2%
Sudan	3	2.2%
Zambia	3	2.2%
Botswana	2	1.5%
Malawi	2	1.5%
Uganda	2	1.5%
Angola	1	0.7%
Cameroon	1	0.7%
Ethiopia	1	0.7%
Ghana	1	0.7%
Mozambique	1	0.7%
Total	137	100%

4.3.3 Home language

The home languages of the respondents are depicted in Table 3 below.

Table 3 Home language

N=137

Language	Frequency	Percentage
Shona	43	31.4%
Kinyarwanda	17	12.4%
English	16	11.7%
Swahili	13	9.5%
Sesotho	7	5.1%
Ndebele	6	4.4%
Siswati	6	4.4%
Arabic	4	2.9%
Labo	4	2.9%
Kirundi	3	2.2%
Portuguese	3	2.2%
Bemba	2	1.5%
French	2	1.5%
Tswana	2	1.5%
Other languages	9	6.6%
Total	137	100%

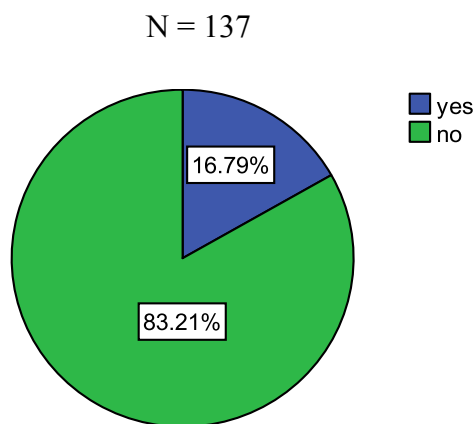
Table 3 above, indicated that the four home languages most commonly spoken by respondents were Shona with 43 (31.4%), Kinyarwanda 7 (12.4%), English 16 (11.7%), and Swahili 13 (11.7%). Bemba, French and Tswana were each spoken by two respondents. There were also nine (6.6%) home languages reported by only one respondent for each language. These were categorised under the “Other” language group. A breakdown of these other languages is as follows (the home country is also given):

- Nigeria: Igala, Hamantan and Isawa, (three languages or 2.2%);
- Uganda: Luganda and Runyolo, (two languages or 1.5%);
- Malawi: Tumbuku and Chichewa, (two languages or 1.5%);
- Kenya: Kikuyu, (one language or 0.7%); and
- Ghana: Fante, (one language or 0.7%).

4.3.4 English language problems

English is the official language at UKZN. Questions 5 and 6 were asked in order to identify respondents who experienced English language problems while at university and what those problems were. Figure 2 shows that of the 137 respondents, 114 (83.2%) did not encounter language problems, while the remaining 23 (16.8%) experienced such problems.

Figure 2 English language problems



Question 6 was an open ended question and asked respondents to indicate their key problems with the English language. Respondents could provide multiple responses. The key English language problems identified by respondents were grouped into four main categories, namely, writing (of essays and assignments), reading (of academic materials), understanding (of lecture sessions and reading materials) and speaking or communicating (with lecturers and colleagues). Some respondents provided more than one answer thus a total of 46 responses was provided by the 23 respondents who answered this question.

Table 4 Major English language problems

N=23

English problems	Frequency	Percentage of respondents
Writing	14	60.9%
Speaking	13	56.5%
Understanding	11	47.8%
Reading	8	34.8%
*Total	46	200%

(* Multiple responses received)

Table 4 indicates that the four categories of problems highlighted, received similar attention. Writing in English was the language problem most experienced by 14 (60.9%) of the 23 respondents, followed by speaking in English (56.5% or 13 respondents); understanding in English (47.8% or 11 respondents). Reading in English was the least frequent language problem experienced for eight (34.8%) respondents. Some English language barriers highlighted by respondents are reflected below:

- A first year international student explained how he cannot clearly express the details about what he needs while he is looking for help with his academic work, for example, consulting with a lecturer to get a better understanding of an assignment topic.
- Another first year international student expressed that “commonly my poor English language background still affects the way of communicating with my lecturers”. She added that every student could normally enjoy participating in group work discussion with other classmates, as far as it creates opportunity to get more explanations and useful examples from colleagues. Yet she said that “I had to take time and think two times before giving contribution because my grammar was not good and I ended up keeping quiet most of the time”.
- A post-graduate international student expressed that as far as he did his undergraduate studies back home in the French language; it became an issue for him while he was searching relevant electronic journal articles for the dissertation and writing research proposal. He noted that “most of time I think in French and try to write in English”.

However, he declared that his supervisor had played a vital role in understanding his language problem and assisting him most of the time which of course created “psychological support for my school work”.

4.3.5 Resolution of English language problems

Question 7 asked respondents to specify the measures undertaken in order to resolve the English language problems experienced. The results are indicated in table 5 below. Twenty three respondents provided solutions, some more than one solution, resulting in a total of 38 responses. The solutions offered were grouped into seven categories.

Table 5 Measures applied to resolve English language problems

N=23

Solutions to language problems	Frequency	Percentage of respondents
Improving spelling and grammar	12	52.2%
Practicing reading skills	8	34.8%
Communication with colleagues	6	26.1%
Language Centre	5	21.7%
Consult lecturers	3	13.0%
Library video room	2	8.7%
TV and Radio news	2	8.7%
*Total	38	165.2%

(* Multiple responses received)

Table 5 shows that the highest measure engaged by respondents was based on improving spelling and grammar with 12 (52.2%) doing so. The library video room and TV and Radio news were the lowest used measures with two (8.7%) respondents doing so in each instance.

4.3.6 Level of study and category programme

The respondents were asked to specify their level of study (undergraduate or postgraduate) and category of study (normal degree programme or exchange programme).

Table 6 Respondents by level and category of study

N=137

Level of study	Student category				Total	
	Normal degree		Exchange		Frequency	Percentage
	Frequency	Percentage	Frequency	Percentage		
Undergraduate	86	62.8%	7	5.1%	93	67.9%
Postgraduate	44	32.1 %	0	0.0%	44	32.1%
Total	130	94.9%	7	5.1%	137	100%

Table 6 indicates that from the total of 137 respondents, 130 (94.9%) enrolled under the normal degree programme. Of these 86 (62.8%) were undergraduate and 44 (32.1%) postgraduate international students. Seven (5.1%) international students (all from the USA) were registered under the university exchange programme and they were all undergraduate students. More specifically, undergraduate respondents were also asked to indicate their year of study and postgraduate students were asked to specify their previous undergraduate institutions. Table 7 below classifies the undergraduate respondents according to their year of study (1, 2, 3 and 4th year). It also indicates the number of postgraduate respondents who did their undergraduate studies at UKZN and those who did not.

Table 7 Year of study and undergraduate institution

N=137

Year of study and place of undergraduate study		Frequency	Percentage of respondents
Undergraduate	First Year	36	26.3%
	Second Year	23	16.8%
	Third Year	30	21.9%
	Fourth Year	4	2.9%
	Sub-total	93	67.9%
Postgraduate	Undergraduate study at UKZN	19	13.9%
	Undergraduate study not at UKZN	25	18.2%
	Sub-total	44	32.1%
Total		137	100%

Table 7 shows that of the 93 undergraduate respondents, the majority, 36 (38.7%) were first year students, followed by 30 (32.3%) in third year and 23 (24.7%) in their second year. There were four (4.3%) undergraduate respondents who were in their fourth year. Of the 44 postgraduate respondents, the larger number of 25 (56.8%) did their undergraduate studies at an institution other than UKZN.

4.3.7 Residence

The international student respondents were asked whether they were staying in the university's residences or not. Ninety-five respondents (69.3 %) were staying in off-campus accommodation and 42 (30.7 %) were staying in the various halls of residence. All seven international student respondents enrolled under the university exchange programme were accommodated in the university's residences.

Section 2

4.4 Information needs and information seeking behaviour of international students

Based on the literature presented in chapter two, the assumption was that, while international students were at UKZN they would experience two types of needs – one related to academic studies (for example, registration process and issues around lectures); and the other related to personal issues (for example accommodation and health issues.) The purpose of this section was to find out from respondents using the critical incident technique (see Chapter 3) what important situation or instance they had experienced at UKZN and what kind of things they needed to find out, learn or know in this situation. For instance, they may have needed to make a decision, find an answer to a question, solve a problem or try to understand something.

Subsection A

4.4.1 Information needs related to academic studies

This subsection specifically provides for the presentation of data concerned with information seeking situations in relation to the academic studies of international students at UKZN. It reflects the fundamental information sources that were consulted by respondents in order to resolve their information needs. Respondents were asked whether they were successful or not at resolving their information needs. They were also asked to identify the major challenges experienced and finally, their preferred information format in terms of academic information needs.

4.4.1.1 Information seeking situation for academic studies

Question 11 asked respondents to describe situations or instances where they had required information to deal with a situation or to solve a problem or to make decisions specifically concerning their academic studies. The critical incident technique was applied with the aim of assisting the respondents to recall their information needs.

A total of 118 respondents were able to provide an incident. Table 8 below shows that the registration process was the most reported academic issue with 38 (32.2%) respondents having experienced a critical incident concerning the process. This was followed by issues around lectures with 36 (30.5%), instances related to assignments and tests was highlighted by 19 (16.1%). Research and dissertation issues were mentioned by 16 (13.6%). A funding issue was reported by 13 (11%) respondents and the least mentioned situation was that of information literacy with 6 (5.1%) respondents doing so. However, as will be noted below, 'Assignments and tests' and 'Research and dissertations' reflected information literacy shortcomings on the part of the respondents.

Table 8 Major information seeking situation as regards academic issues

N=118

Situation	Frequency	Percentage of respondents
Registration process	38	32.2%
Issues around lectures	36	30.5%
Assignments and tests	19	16.1%
Research and dissertations	13	11%
Financing studies	8	6.8%
Information literacy skills	4	3.4%
Total	118	100%

4.4.1.2 Sources of information consulted

Question 12, an open ended question in which respondents could provide multiple responses, sought to establish the main sources of information consulted by the respondents in relation to their academic studies. The 203 responses in terms of sources of information consulted from 118 respondents were grouped into 13 categories. These sources are provided in Table 9 below.

Table 9 Major sources of information

N=118

Sources of information	Frequency	Percentage of respondents
Library resources and services	41	34.7%
Faculty Offices	35	29.7%
Internet	23	19.5%
International Student Office (ISO)	21	17.8%
Lecturers	20	16.9%
Librarians	20	16.9%
Colleagues	20	16.9%
Student Counseling Centre	6	5.1%
Student Funding Centre	5	4.2%
Student Representative Council (SRC)	4	3.4%
International Students Associations	4	3.4%
LAN Assistants (help desk)	2	1.7%
Risk Management Services (RMS)	2	1.7%
*Total	203	171.9%

(* Multiple responses received)

Table 9 shows that from the total of 118 respondents, the most frequently used source of information was library resources and services. A large number of international students, 41 (34.7%) used library resources and services. This was followed by 35 (29.7%) respondents who consulted Faculty Offices. Twenty three (19.5%) respondents used the Internet and 21

(17.8%) consulted the International Student Office (ISO). Lecturers, librarians and colleagues were each consulted by 20 (16.9%) respondents in relation to their academic studies.

4.4.1.3 Success with information source consulted

Question 13 was asked in order to establish the number of respondents who were successful with the information sources consulted by them. Table 10 shows that from a total of 118 who answered this question, 101 (73.7%) were successful and only 17 (12.4%) were not successful with the sources they had consulted for their academic studies.

Table 10 Success with sources consulted

N=118

Response	Frequency	Percentage
Yes	101	73.7%
No	17	12.4%
Total	118	100%

4.4.1.4 Major problems experienced by respondents

Question 14, an open question, asked the respondents what problems they experienced during the process of consulting information sources in order to satisfy their information needs related to their academic studies. Respondents could list more than one problem. Fifty two respondents answered this question and provided a total of 60 responses between them.

Table 11 Major problems experienced by respondents

N=52

Problems experienced	Frequency	Percentage of respondents
Information literacy skills	21	40.4%
English language problem	15	28.8%
Delay of services delivered	8	15.4%
Unstable Internet and GroupWise	7	13.5%
No overnight use of library and LAN	5	9.6%
Time table clashes	4	7.6%
*Total	60	115.3%

(* Multiple responses received)

Table 11 shows that from the total of 52 respondents who answered this question, information literacy skills was the most frequently experienced problem reported by 21 (40.4%) respondents. This was followed by the English language problem mentioned by 15 (28.8%) respondents. Delay of services delivered by the ISO, the Department of Home Affairs and the Ingwe Insurance Company (in terms of medical aid cover) was reported by eight (15.4%) respondents. Unstable Internet and GroupWise (email service) problems were reported by seven (13.5%) respondents. The limited time for using the library and LAN (overnight) was reported by five (9.6%) respondents who were staying off campus. The least mentioned problem was time table clashes reported by four (7.6%) respondents in relation to their academic studies.

4.4.1.5 Most preferred information format for academic studies

Table 12 shows that the most preferred information format listed by 58 (42.3%) respondents was the electronic format. It was followed by the face-to-face format reported by 44 (32.1%) respondents. The print format was preferred by 33 (24.1%) respondents and the audio format, the least preferred information format of respondents, with only two (1.5%) mentioning it.

Table 12 Preferred information format

N=137

Information format	Frequency	Percentage
Electronic	58	42.3%
Face-to-face	44	32.1%
Print	33	24.1%
Audio	2	1.5%
Total	137	100%

4.4.1.6 Reasons for information format preference

The respondents were further asked to provide a reason/s for their format preference.

The 58 respondents who preferred the electronic format provided the following reasons:

- Accessibility reported by 35 (60.3%);
- Ease of use reported by 19 (32.8%); and
- Cost effectiveness reported by four (6.9%) respondents.

The 44 respondents who preferred the face-to-face format provided the following reasons:

- Open discussion opportunity reported by 28 (63.6%); and
- Getting quick feedback or answer reported by 16 (36.4%) respondents.

The 33 respondents who preferred the print format provided the following reasons:

- Permanence reported by 24 (72.7%); and
- Trustworthiness reported by nine (27.3%) respondents.

Finally, the two respondents who preferred the audio format did not give a reason for preferring this information format.

Subsection B

4.4.2 Information needs related to personal issues

This Subsection provides the results relating to the personal issues of international students at UKZN. It considered the basic information sources that were consulted by the respondents in order to resolve a given instance identified. Respondents were asked whether the information obtained was useful or not. As in Subsection A above, respondents also highlighted their preferred information format.

4.4.2.1 Information seeking situation for personal issues

Question 16 asked respondents to describe situations or instances where they had required information to deal with a situation or to solve a problem or to make a decision specifically concerning their personal issues. The critical incident technique was applied with the aim of assisting the respondents to recall their information needs.

Table 13 Major information seeking situation for personal issues

N=83

Seeking situation	Frequency	Percentage
Accommodation	29	34.9%
Health issues	21	25.3%
Family issues	16	19.3%
Entertainment	9	10.8%
Culture issues	5	6%
Security issues	3	3.7%
Total	83	100%

Table 13 above shows that from a total of 83 respondents, accommodation was the instance related to personal issues most reported by respondents with 29 (34.9%) of the 83

respondents who described an instance, doing so. This was followed by health issues mentioned by 21 (25.3%) respondents and family issues, mentioned by 16 (19.3%). Other instances mentioned related to entertainment, culture and security issues.

4.4.2.2 Major information sources

Question 17, an open ended question, sought to establish the major information source/s consulted by the respondents in relation to their personal issues. The results are depicted in Table 14 below. The 83 respondents provided a total of 110 responses which were grouped into 12 information source categories.

Table 14 Major information sources used by respondents

N=83

Information sources	Frequency	Percentage of respondents
Colleagues	22	26.5%
International student Office (ISO)	20	24.1%
Student Housing Office	16	19.3%
Internet	16	19.3%
Student Counselling Centre	12	14.5%
Campus Clinic Centre	8	9.6%
Social networks	6	7.2%
Student Representative Council	4	4.8%
Campus Sport Union	2	2.4%
International Student Associations	2	2.4%
Risk Management Service	1	1.2%
Notice board	1	1.2%
*Total	110	132.5%

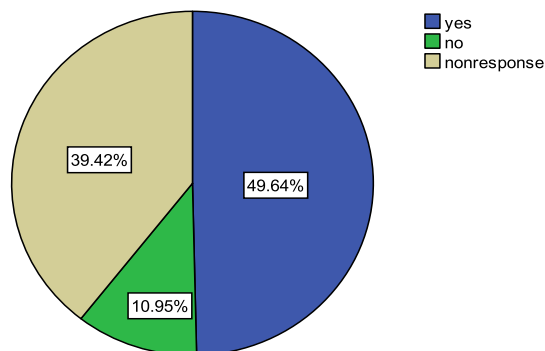
(* Multiple responses received)

Table 14 shows that from the total of 83 respondents, 22 (26.5%) international students consulted their colleagues. This was followed by 20 (24.1%) students who consulted the International Student Office. Two information sources, namely, the Student Housing Office and the Internet were consulted by the same number of respondents - 16 (19.3%). Twelve (14.5%) consulted the Student Counselling Centre. Eight (9.6%) respondents used the Campus Clinic Centre and six (7.2%) used social networks such as Facebook, Twitter, Mixta and MySpace.

4.4.2.3 Information obtained useful or not

Question 18 was asked in order to establish whether the information obtained was useful. Figure 3 below shows that of the 83 international students who answered this question, the majority, 68 (82%) found the information obtained to be useful for resolving their personal issues while 15 (18%) did not.

Figure 3 Usefulness of information obtained



4.4.2.4 Reasons for information obtained to be not useful

Of the 15 international students who specified that information obtained was not useful, only one (6.7%) did not provide a reason. The remaining 14 (93.3%) respondents provided the following reasons:

- List of private landlords obtained from Student Housing was not updated (four or 28.6%);
- Not easy to communicate with some classmates who like to speak IsiZulu most of the time (three or 21.4%);
- Hard to communicate with family members (three or 21.4%);
- Slow Internet connectivity and limited wireless coverage (two or 14.3%); and
- Too much irrelevant results from the Internet (two or 14.3%).

4.4.2.5 Preferred information format for personal issues

Table 15 shows that the most preferred information format for resolving personal issues listed by 65 (47.4%) respondents was the face-to-face format. It was followed by the electronic format highlighted by 60 (43.8%) respondents. The print format was preferred by 10 (7.3%). The audio format was the least preferred format in relation to personal issues listed by only two (1.5%) respondents.

Table 15 Preferred information format

N=137

Information format	Frequency	Percentage
Face-to-face	65	47.4%
Electronic	60	43.8%
Print	10	7.3%
Audio	2	1.5%
Total	137	100%

Section 3

4.5 International Student Office and additional comments

Section 3 provided information related to the International Student Office (ISO) which has the responsibility of assisting international students registered on the Pietermaritzburg Campus. The final question asked for any additional comments from the respondents.

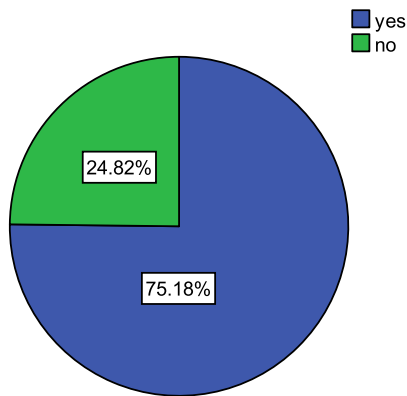
4.5.1 Information related to International Student Office

International students were asked whether they were aware of ISO services or not; and what channels were used in order to find out about those services. They were also asked to rate the usefulness of those services and to elaborate on the reasons why some services (if any) were not useful to them.

4.5.1.1 Awareness of ISO's services

Question 21, was asked to determine the number of respondents who were aware of the available services offered by ISO on the Pietermaritzburg Campus. Figure 4 shows that from a total of 137 who answered this question, 103 (75.2%) respondents were aware and 34 (24.8%) were not aware of the services provided by the ISO.

Figure 4 Awareness of ISO services



4.5.1.2 Channels used to find out about ISO’s services

Question 22 asked the respondents how they got to know about ISO’s services. Table 16 shows that the most frequently listed channel was the Faculty Office, mentioned by 37 (35.9%) of the 103 respondents who answered the question. Colleagues were the second most used channel by 29 (28.2%) respondents. The ISO itself was listed by 27 (26.2%) and the UKZN website by eight (7.8%) respondents. The least listed channel mentioned by only two (1.9%) respondents was the Student Counselling Centre.

Table 16 Channels used to know about ISO's services

N=103

Channels used	Frequency	Percentage
Faculty Office	37	35.9%
Colleagues	29	28.2%
International Student Office	27	26.2%
UKZN Website	8	7.8%
Student Counselling Centre	2	1.9%
Total	103	100%

4.5.1.3 Usefulness of ISO's services

Question 23 asked respondents to indicate the extent to which four services provided by the ISO are or had been of use to them. The respondents were provided with a list of the four services and there was an option to list other services. The results are depicted in Table 17 below.

Table 17 Usefulness of ISO's services offered to respondents

N=118

Services	Very useful		Useful		Not useful		Total number of respondents	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Study visa-permit	44	37.3%	54	45.8%	20	16.9%	118	100%
Medical aid cover	43	36.4%	52	44.1%	23	19.5%	118	100%
International clearance	53	44.9%	53	44.9%	12	10.2%	118	100%
Faxes and registered mail	24	20.4%	49	41.5%	45	38.1%	118	100%

Table 17 shows that the majority of respondents found the services they used to be 'useful' as opposed to 'very useful' or 'not useful' with only 21.8% finding services not useful. The vast majority of the 118 respondents who rated the 'Study visa-permit' applications and extensions service considered the service to be either very useful or useful - 98 (83.1%). In terms of the service 'Applying for medical aid cover', again a significant majority 95 (80.5%) rated this service as either very useful or useful. The large number of 106 (89.8%) respondents rated the 'International clearance' service as either very useful or as useful. Finally, a smaller majority 73 (61.9%) rated the 'Faxes and registered mail' services as either very useful or useful. No respondents specified any other service.

4.5.1.4 Reasons for considering ISO's services not useful

Question 24, an open ended question, asked respondents to provide a reason/s for why they considered services to be not useful. Many of the reasons given were not the "fault" of the

ISO itself but pointed to other offices involved such as the Department of Home Affairs, Embassy Office and Insurance Companies.

Twenty (16.9%) respondents considered services related to the Study visa-permit applications and extensions not useful. The following reasons were provided:

- Small number of ISO staff to follow up (11 or 55%);
- Home Affairs' workers were not friendly and unwilling to assist (4 or 20%);
- Too much waiting time to get feedback from the Department of Home Affairs (3 or 15%); and
- Difficult to get support from Embassy Office (2 or 10%).

Twenty-three (19.5%) respondents considered Medical aid cover services not useful. They provided the following reasons:

- Too few life insurance companies involved (13 or 56.5%);
- Application took long time to start using medical cover policy (5 or 21.7%);
- High medical aid premium charges (3 or 13.1%); and
- Not easy to get refunding of money paid off in emergency cases (2 or 8.7%).

Twelve (10.2%) respondents considered International clearance services not useful. They provided the following reasons:

- Delay of receiving the two pre-requested documents, including study visa-permit from Home Affairs and Medical aid cover from the insurance company (6 or 50%);
- Not allowed temporary registration while waiting for the above documents (3 or 25%);
- Insufficient employees in the International Student Office (2 or 16.7%);
- No international student in the ISO as advisor (1 or 8.3%).

Forty-five (38.1%) respondents considered Faxes and registered mail services not useful. They provided the following reasons:

- Irregularity of Faxes and registered mail services (37 or 82.2%); and
- Lack of privacy for received messages before being collected by students (8 or 17.8%).

4.5.1.5 Respondent’s suggestions for the provision of other ISO’s services

Question 25, an open question, asked respondents to indicate whether there were any other services that they thought the ISO should be providing.

Table 18 Additional ISO services suggested by respondents

N=49

Additional ISO services	Frequency	Percentage of respondents
Follow up other service providers	18	36.7%
Regular workshop and meetings	14	28.6%
Funding special events	9	18.4%
Communication via GroupWise	8	16.3%
Reduce international levy	7	14.3%
Provide equipped interaction room	5	10.2%
Connection with private companies	5	10.2%
*Total	66	134.7%

(* Multiple responses received)

Of the 103 international students who declared that they were aware of the ISO’s services asked under question 21, 49 (47.6%) gave a response. The 66 responses were sorted into seven categories. Table 18 above shows that 18 (36.7%) of the 49 respondents reported the need for the ISO to “follow up” with other service providers, that is, to overcome the likely delay in services delivered to international students. For example, ISO should be in regular communication with the Housing Office about accommodation issues. Fourteen (28.6%) respondents suggested the need for regular workshops and meetings on making students aware about available services for them. Nine (18.4%) expressed the need for funded special events such as cultural and independence days which might facilitate social interaction between local and international students. Eight (16.3%) respondents expressed the importance of communication between the ISO and international students through GroupWise, the University’s email system. Seven (14.3%) expressed the need for the ISO to address the reduction of the international levy. The provision of a well-equipped interaction room (with computers and information resources) and connecting international students with

private companies (to create scholarship opportunities) were each reported by five (10.2%) respondents.

4.5.1.6 Respondents' suggestions for improvement of services

Question 26, an open question, asked respondents to indicate if there was any way that services for international students could be improved as well as give any further comments.

Table 19 shows that from the total number of 42 respondents who provided a total of 80 suggestions, 23 (54.8%) respondents reported the necessity of increasing the University's residences. Eighteen (42.9%) indicated that the Registration Appeals Committee should assist both local students and international students. Seventeen (40.5%) highlighted the need for allowing open competition from many life insurance companies for offering medical aid cover to international students. Ten (23.8%) expressed the need for bursary and scholarship support. Seven (16.7%) reported that UKZN could develop a better level of collaboration with the Department of Home Affairs and five (11.1%) respondents highlighted the benefit of having tours around the Campus.

Table 19 Improvements of UKZNP services to international students

N=42

Improvement to services	Frequency	Percentage of respondents
Increase residences	23	54.8%
Registration Appeals Committee	18	42.9%
Many life insurance companies	17	40.5%
Bursary and scholarship supports	10	23.8%
Collaboration with Home Affairs	7	16.7%
Tours around Campus	5	11.1%
*Total	80	189.8%

(* Multiple responses received)

4.5.2. Additional comments

Question 27 asked respondents to provide any additional comments. Twelve respondents provided the following comments:

- UKZN Student Housing Office should prioritize international students when allocating students in residences, especially first year students who are coming to the University for the first time (seven or 58.3%);
- UKZN has to make international students aware of all the services available to them in order to ensure the maximum utilization of these services (given that many of the services were expensive to implement) (five or 41.7%);
- It would be better if international students themselves became part of providing support to other students. These students understand much better the situation of their friends since they are one of them. They could also assist the ISO especially at the beginning of each semester when there is a long queue of students waiting to get assistance from the Office (four or 33.3%);
- All international students should attend the orientation programme in order to get information about the services offered by the various units on campus and that this could greatly assist in terms of who to approach in the future when trying to satisfy an information need (four or 33.3%);
- Social and cultural interchange events accommodating both local students and international students need to be arranged (three or 25%);
- The provision of accommodation at a lower cost for the vacation period to international students who stay in campus residences. The suggestion was based on the limited budget for some international students who might not afford the travelling cost for each end of semester to go home and come back to university for just a period of one month (two or 16.7%); and

- Increasing the number of computers in the library and extension of wireless around the campus including all the halls of residence (two or 16.7%).

4.6 Results from the interview with the Head of the International Student Office

The results from the interview are presented according to the order of the questions in the semi-structured interview schedule (Appendix 4). The interview was divided into sections as was the survey questionnaire for international students. The first part (questions one and two) related to general information concerning the HISO. The second part consisted of questions three to eleven and focused on services provided by the ISO to international students. The third and final part of the interview comprised questions 12 and 13. Question 12 asked the HISO to elaborate on the cooperation that might exist between the ISO and other UKZNP offices in relation to the services offered to international students. Question 13 asked the HISO to make further comments.

4.6.1 General information

This section provided information about the length of service and frequency of assisting international students with services provided by International Student Office on Pietermaritzburg Campus.

4.6.1.1 Length of service

The HISO was asked the length of time she had spent working for the ISO on Pietermaritzburg Campus in order to determine whether the length of time had influenced her ability to support the international students. The HISO had worked for the Office for a period of over five years.

4.6.1.2 Frequency of assisting international students

The respondent was asked to state how often she assisted the international students in order to determine her experience in working with international students. The respondent replied “very often”, pointing out that international students were coming to the Office looking for multiple kinds of support. The respondent mentioned that students “came in a bundance” mostly at the beginning of each semester.

4.6.2 Services provided by the International Student Office (ISO)

Question 3, an open question, asked what services were provided by the ISO to the international students enrolled on the Pietermaritzburg Campus.

The respondent highlighted the major services provided by ISO to international students. These were:

- Assistance with applications and extension of study visa-permits from the Department of Home Affairs;
- Assistance with applications for medical aid cover from life insurance companies;
- Assistance with emergency faxes, registered mail and telephone calls which allow the students to communicate with their embassy for official documents especially passport queries and to communicate with relatives for family-related issues, for instance, in cases of illness or even death;
- Offering international clearance to students which allows them to register for their studies; and
- Provision of guidance and advice in relation to the right sources to be consulted by international students depending on the nature of their problem. For example: consultation of the Faculty Office for registration process, Risk Management Services (RMS) for student card access, Housing Office for accommodation issues, and advising them on how to use the inter library loan service for obtaining academic materials from other universities.

4.6.2.1 Awareness of ISO services

The respondent was asked if the international students enrolled on the Pietermaritzburg Campus were aware of the services provided by the ISO.

The HISO answered that most international students knew of the services offered by the ISO. In addition, she said:

Based on the fact that each international student before being allowed to register for his/her studies on the campus has to first get international clearance which is offered by the International Student Office. This means that the student gets to know our services one way or another.

4.6.2.2 Strategies used by ISO to make students aware of its services

The respondent indicated that the ISO makes international students aware of available services through the following strategies:

- During orientation for international students each semester;
- Issuing international student guides (handbooks);
- Advertising through the UKZN website;
- Campus notice boards around the campus; and
- International culture day for international students (once a year).

However, the respondent acknowledged that some international students do not take the importance of participating in orientation programmes seriously enough. She said that “some students rely more on their friends than attending orientation programmes”. Consequently, they might not get all the information they need or as effectively as they would have had they participated in the official university programmes themselves.

4.6.2.3 Services most used by international students and main reason for this use

Questions 5 and 6, asked the respondent to specify services that were used the most by international students and the reason/s for this usage. The respondent reported that normally all services that had been indicated by her above are frequently used by international students. The reason was the fact that a number of these services are, in effect, legal requirements and students had no choice but to do what was legally required.

4.6.2.4 Under-utilized services and reasons for this

Questions 7 and 8 asked the respondent to identify the services offered by the ISO that she considered are under-utilized and if possible to elaborate on the likely cause of that under-utilization. The respondent stated that:

It is not easy for me to identify which service is under-utilized or not because there is no specific measurement to measure the level of usage from one service to another.

However, the respondent added that the ISO was presenting to the university management a project proposal for establishing a specific resource centre (room space with well equipped computers and information resources) to accommodate the needs of international students. Whether this would take place or not was still in doubt because of budget constraints and the university restructuring which was in process.

4.6.2.5 Challenges in the provision of ISO services

Questions 9 and 10, asked the respondent to specify the challenges in the provision of services to international students.

The respondent reported that insufficient funds may handicap some useful information services as indicated also in Section 4.6.2.4 above. Another challenge was the renewal of study visas. In this regard the HISO said:

The Department of Home Affairs has a huge delay because now everything goes to Pretoria, and we try to get someone from the Department to come during the orientation programme and explain to students what is going on but they don't come.

A third challenge mentioned by the respondent was student's non-participation in the orientation programmes. Another challenge was the issue of students not willing to ask for help with the result that students found themselves in a more difficult situation than they were supposed to be. The respondent here gave an example of one international student who kept quiet while her passport expired and only came a month later to look for assistance because she needed to go back home for the holidays. Surprisingly, when the HISO asked the student the reason why she did not renew her passport at the right time, the answer was that "I was busy with my exams"! The HISO told the student to go to her Embassy Head Office in Pretoria and explain personally her case because it was her only option. The expense, in terms of both time and money could have been easily avoided.

Finally, the respondent stated that the ISO keeps on reminding international students of the importance of staying up-to-date with their documentation, to read the information available to them and to ask for help whenever they are in need either in terms of their academic work or their personal lives.

4.6.2.6 Initiatives for service provision

Question 11 asked the respondent if there were any current initiatives regarding information services for the international students at the University of KwaZulu-Natal.

The HISO pointed out that the new policy regarding international students was almost completed. She noted that since the merger between the University of Natal and the University of Durban-Westville, no new policy had been developed to reflect the "new" institution. The HISO was, however, concerned that the present restructuring of the University could affect many strategic plans including the new policy. Finally, she added that:

After realizing that international students do not regularly visit the UKZN website and read information about our services, we are in process of making a DVD about our

services for them and we decided to also print a small handbook. Hopefully, at the beginning of next year (2012), these tools will help us to even accommodate those students who may come to our office after the orientation programme.

4.6.3 Cooperation of the ISO with other student services and additional comments

The respondent was asked to elaborate more about the existing collaboration between the ISO and other student service providers on campus. Beyond that, the respondent was also invited to give additional information regarding services that are offered to international students.

4.6.3.1 Cooperation of the ISO with other student services

Question 12, asked the Head of the International Student Office to elaborate more about the cooperation that might exist between the ISO and other student services on campus, for example the Student Counselling Centre and Student Representative Council (SRC), with regard to the international students.

The respondent stated that “definitely there is inevitable collaboration between the ISO and other student service providers on campus”. The respondent noted that basically all services provided to students by the various university departments were designed for the benefit of everyone, whether one was a local student or an international student. Beyond that, the ISO is in charge of assisting international students on a daily basis because they might face some specific challenges. The respondent gave an example of a first year international student who may not know anyone on his/her first day of arriving on campus, “This person of course needs special attention and welcome support” she added.

4.6.3.2 Additional comments

Question 13, asked the HISO to make additional comments regarding services that are provided for international students.

The respondent highlighted that all international students need to know the benefits that might be brought by arriving on campus on time and their involvement in an orientation programme. In addition, the respondent emphasized that international students need to show an interest in the cultural day held on campus once a year given that it is as an opportunity to share and celebrate diversity. She added that other events could be arranged with better budget support from the University.

4.7 Summary of the Chapter

In this chapter the questionnaire and interview results were presented. The information needs of international students and their information seeking behaviour at the UKZN were identified and depicted using tables and charts. The information needs were grouped into academic needs and personal issues. The critical incident technique helped to identify information seeking behaviour of international students. The results of the interview with the HISO were presented. It is evident from the results of both the questionnaire and interview that there is a need for the UKZN to continue paying attention to information services designed for international students.

Chapter 5 Discussion of results

5.0 Introduction

Chapter 5 reflects on the findings of the study presented in Chapter 4 which are considered in the light of the research problem presented in Chapter 1 and the literature review. The purpose of this study was to investigate the information needs and information seeking behaviour of international students on the Pietermaritzburg Campus of the University of KwaZulu-Natal (UKZNP).

The research intended to answer the following questions:

- What is the demographic profile and academic level of study of international students at UKZNP?
- What are the languages spoken by international students?
- What kinds of information needs do international students have?
- How do international students obtain the information they need?
- Where do international students find the information they are seeking?
- What problems do international students experience in terms of acquiring information?
- What steps is UKZNP undertaking to improve services for the international students?
- How can services that are offered to international students be improved?

The discussion in this chapter is structured around the above research questions. The results discussed in this chapter are those presented in Chapter 4 which were derived from the questionnaires completed by a sample of international students at UKZNP and the interview with the Head of International Student Office (HISO) on the campus. The information behaviour model that was referred to in Chapter 2 is used as a framework for discussing the international students' information seeking behaviour patterns for both academic studies and personal issues. As noted in Chapter 3, it is acknowledged that the sampling process used was not a random one and thus no claims can be made concerning the representativeness of the sample and subsequent findings with regard to the total population of international students at

UKZNP. However, the researcher is of the opinion that the findings do go some way toward reflecting the views of these students and thus are of value to the relevant authorities at UKZNP.

5.1 Background information

This section provides a picture of who the international students who responded to the questionnaire are. In doing so, this section explores the findings relating to respondents' demographic information including gender, age, country of origin and home languages spoken. Information about the Head of the International Student Office (HISO) at UKZNP is also given.

5.1.1 Demographic profile of the respondents

The study focussed on international students, whether undergraduate or postgraduate, enrolled at UKZNP. In terms of gender a majority of respondents were male: 79 (57.7%) of respondents were males and 58 (42.3%) were females. In terms of age, a majority 100 (73%) of the respondents were from the age group 18-22 and 23-27 years and only eight (5.8%) respondents were over 38 years. This split probably reflects students' age distribution generally with tertiary study being directed at "younger" persons. Marriage and family responsibilities possibly account for the few respondents over 38 years particularly given the distances and time away from families involved. In terms of level of study, there were more undergraduate international students, 93 (67.9%) respondents than postgraduate international students, 44 (32.1%) respondents. First year international students represented the largest number of respondents as reflected in section 4.3.6 and this suggested a greater need for information given that these students were likely to be new, both to South Africa and to the tertiary education environment, that is, UKZN.

In terms of place of residence 69.3% of respondents were staying in off-campus accommodation and only 30.7% of respondents were staying in the institutions' halls of

residence. This could alert us to the accommodation issues raised by large number of respondents (as reflected in Section 4.3.7 of Chapter 4).

The HISO had worked for the Office for a period of over five years. This, arguably, is sufficient time for the HISO as a service provider to develop good background knowledge about the information seeking situations experienced by the international students either in relation to their academic studies or personal issues.

5.1.2 Country of origin and home languages

The respondents in terms of country of origin were largely from the African continent except those international students who were in an exchange programme and they were all from the United States of America (USA). The results of the study indicated that Zimbabwean students represented the largest number of respondents with 56 (40.9%) respondents. This could reflect the fact that in terms of home languages spoken by respondents, the Shona language which is spoken by most of the Zimbabwean students rather than the Ndebele language, was the home language spoken by the largest number of international student respondents as shown (see Section 4.3.3 of Chapter 4).

Apart from the seven American students, two students from Nigeria and seven students from Zimbabwe reported English as their home language (see Table 3). Generally speaking, respondents, other than the American students, had as their own home language, a language other than English.

The findings presented under Section 4.3.2 of Chapter 4 reinforced the point expressed by Schoole (2006: 10) in the literature review. He noted that historically international students from Africa represented 81.2% of the total of foreign students registered at South African universities (which of course includes UKZN). In this regard, the findings of the study showed that 94.9% of the respondents were from African countries and only 5.1% of respondents were from outside of African, in this instance the USA.

Kishun (2007) also noted that most students from the Southern African Development Community (SADC) countries were registered for undergraduate courses, while students from other African countries were mainly registered for postgraduate degrees. However, the

present study noted that even international students from other parts of the world might come to study in South Africa as undergraduate students, for example American students registered at UKZNP for the 2011 academic year were all undergraduate students.

Furthermore, Mpinganjira (2011: 2182) added that region (SADC) students were drawn to higher education in South Africa on account of proximity, cultural and linguistic links, and quality of educational resources. All these indicators were indicated in the results of the current study. For instance, in terms of proximity, Zimbabwean students represented almost a half (45.5%) of the total number of international students registered on the Pietermaritzburg Campus (Marais 2011). In terms of cultural links, it could be argued that students from Lesotho and Swaziland do easily integrate into South African culture. In terms of linguistic links, the Ndebele home language spoken by some of the Zimbabwean students was similar to the IsiZulu language spoken by many South African students enrolled at UKZNP.

5.2 English language problems

Foley (2010: 10) pointed out that “most international students come from countries where English is neither an official language nor a medium of instruction” as reflected in the Section 2.2.4.1 of the literature review. In terms of English language problems, 23 (16.8%) respondents reported experiencing such problems which arguably had a negative impact on their academic performance. The major English language problems experienced by respondents included but were not limited to: writing (of essays and assignments), reading (of academic materials), understanding (of lecture sessions and reading materials) and speaking or communicating (with lecturers and colleagues).

Ikoja-Odongo and Mostert (2006: 148) highlighted that information seekers may take personal responsibility for their own processes or otherwise they decide to work through an intermediary in order to respond to a certain situation or to solve an identified problem. In this context, the results of the study revealed that in terms of solving English language problems, international students applied both the above strategies as reflected in 4.3.5 of Chapter 4. By taking personal responsibility international students practiced their reading skills and improved their spelling and grammar through the use of library books, journals,

dictionaries and encyclopaedias. Students also worked through intermediaries as another strategy by attending the English Language Centre on Campus and consulting lecturers.

5.3 Responses to the research questions as regards information seeking behaviour

Based on the results from the questionnaires for international students and the semi-structured interview with the HISO, there was a common understanding on the part of the respondents about the importance of referring to multiple information systems whether formal or informal which in turn depended on the nature of the critical instance identified by the international students as information seekers. In this context, the information seeking behaviour model adapted from Wilson's (1999) model represented a solid background for the discussion of results in this chapter.

5.4 Information seeking behaviour

In this section, information seeking behaviour describes the different actions international students may engage in when identifying their own needs for information, seeking for such information in any way, and using that information (Wilson 1999: 249). The effort to satisfy the perceived need would result in information seeking behaviour. Information behaviour of international students was clearly evident through the following major components: information needs, information seeking behaviour and information use for meeting the perceived information need. For better understanding, the respondents' needs were placed in two main categories, namely, needs relating to academic studies and needs relating to personal issues.

5.4.1 Information needs related to academic studies

This section discusses the results relating to the respondents' information needs in relation to their academic studies. Discussed are the information seeking situations, sources consulted by

respondents and the success of sources used, key factors that influenced their information behaviour and the information format they look for and prefer.

5.4.1.1 Information seeking situations for academic studies

Davies (2007: 788) indicated that students may draw information from the institution's resources for a variety of purposes in their daily routine activities, such as academic and living issues. In this context, academic information needs are an important part of every student's life, including of course international students. Kaniki (2001: 195) highlights that people will often remember what they consider to be critical to them. As discussed in Chapter 3 the critical incident technique was applied in order to help the respondents to remember information needs relating to their academic studies.

Registration was the most listed information seeking situation identified by 32.2% of the international student respondents. They particularly underlined the key preliminary services involved in the registration process such as international clearance offered by the International Student Office (ISO) and financial clearance delivered by the Student Funding Centre. These were the two main documents requested by the Faculty Office before issuing registration clearance to the international student. Definitely, registration clearance was considered important because it was not only proof of being registered at the UKZNP but it also allowed the registered student to get access through the Risk Management Office (RMS) to university facilities, including access to the library, access to the LANs for computers and Internet networking, access to the University email system (GroupWise), access to the University buildings for entering lecture venues and, also importantly, access to the campus residences for those international students who were accommodated by UKZNP.

In order to obtain international clearance from the ISO, international students had to produce three documents, namely, a valid passport; a study visa-permit from the Department of Home Affairs, and medical aid cover issued by a South African insurance company. Similarly, in order to get financial clearance from the Student Funding Centre, the international student had to ensure that there were no outstanding fees that he/she owed the University. In addition, international students are charged an international levy of R1 800 per year by the UKZN (a

source of much discontent and confusion among students) and this amount had to be paid before registering at UKZN.

The registration process was not only the most mentioned critical incident but respondents also highlighted its inevitable negative impact on their academic lives as a whole. In one instance, a respondent indicated that due to outstanding fees for his second year of study (which was through no fault of his own) he was not allowed to register for his third year. In this regard, he said that:

I had suffered more when I was told that the international students were prohibited to get assistance from the Registration Appeals Committee (RAC) (as local students could do). In fact, I could not manage to register until the outstanding amount would be settled.

Fortunately, he had generated support from the Student Representative Council (SRC) Office who had negotiated with university management to allow late registration for both local students and international students enrolled at UKZN.

The study revealed that all the requirements listed had to be met by every international student before being allowed to register at UKZN. Thus the registration process was an important part of the academic needs of the international students. Respondents identified some key issues experienced during their registration process. These issues included but were not limited to the huge delay of waiting for the study visa-permit from the Department of Home Affairs as each application had to be sent to Pretoria, and the poor service provided by the Ingwe Insurance Company providing the medical aid cover international students were obliged to have. For example, it was pointed out that the company did not help in emergency situations – a second year student had an accident and he had to cover the hospital charges himself without being refunded by the company.

Issues around lectures were also raised by 30.5% of respondents. They referred to their limited ability to understand lecturers while they were giving explanations and illustrations during class time particularly when technical terms were being used. For some of the respondents this occurred even after class (during consultation hours). It is evident that this issue links in with the lack of English language skills.

Respondents also highlighted the challenges related to information literacy skills which could handicap and retard their academic performance since they could not easily manage to do

what was expected of them by the lecturers. For example, the lack of such skills impacted on their ability to browse the Internet and search library databases to get the relevant academic resources including books and journals. Not being able to do so or not being able to do so efficiently and effectively undermined their getting a better understanding of the lecture notes, being able to complete their assignments, and preparing for tests and exams. For example, a first year international student revealed that she did her first practical quiz in the computer lab but failed to submit it online because of not knowing how to perform the process of online submission and received a mark of zero. At the end of the semester the quiz mark was added to other assignments to calculate the class mark. Thus her class mark was lower than it should have been due to her not having what could be considered an important information literacy type skill.

Similarly most postgraduate international students were, due to a lack of information literacy skills, struggling to collect useful online information related to their research projects or dissertations. They had noted the role which information literacy skills could play in fulfilling academic tasks. Other academic issues identified by respondents included changing their study programme (from one school to another school), changing modules, identifying major subjects from elective subjects and difficulties in locating lecture venues.

In terms of information seeking situations in relation to their assignments, preparation of tests and research projects (dissertations and theses), international students were often seeking information through intermediary support, such as librarians, lecturers and colleagues. This will be elaborated on in the section below dealing with sources used by such students.

International student respondents also specified financial issues concerning their studies. For example, one student who was doing her fourth and final undergraduate year pointed out that due to her country's financial crisis, her local currency has decreased in value to the extent that her parents' savings reserved for her studies could no longer cover the charges as was planned. Consequently, she indicated that her parents had decided to stop paying school fees for her young sister to enable them to pay for the final year of her degree. She added that she was hopeful that her sister would go back to school the following year.

Similarly, a second year student pointed out that:

At the beginning I was sponsored by my family, but unfortunately my father's business had been corrupted. Since my first year academic records were good, it has created chance for me to obtain a scholarship from my government for further studies.

Moreover, the respondents pointed out that while academic fees were very high there were no other means of financial support unlike for local students who had access to bursaries, scholarships and financial aid.

5.4.1.2 Sources of information consulted

International students articulated complex phenomena of information behaviour and it was difficult to separate information seeking situations from major information sources consulted by respondents in this study.

The findings revealed that the top three sources consulted by international students for meeting their information needs related to their academic studies were library resources and services (34.7% of respondents), Faculty Offices (29.7%) and Internet facilities (19.5%). Other sources used by international students were lecturers, subject librarians and colleagues each used by the same percentage of respondents, namely, 16.9%. The International Student Office was reported by 17.8% of respondents as a source used for academic information needs.

The results indicated that there was no one specific information source which could be seen as the "best" source for each academic instance. In other words, it was found that the source consulted to meet a particular situation would depend on the nature of the academic need. The study found that both formal and informal sources were consulted by international students for meeting their information needs as reflected in Section 2.2.4 of the literature review. For instance, formal sources used by international students were dominated by library resources and informal sources were dominated by communicating with colleagues (see Table 9).

In terms of library resources and services for meeting academic study needs, respondents were benefiting from various library facilities, such as, a safe place to study, searching for books and journals through the Online Public Access Catalogue (OPAC), borrowing library

materials, sometimes meeting with classmates for group discussions related to their studies in the designated library discussion rooms, and using the Academic Reserves collection. Other library services mentioned by respondents were Inter Library Loan (ILL), photocopy and printing, and the issue desk for borrowing books and reservation services.

Undergraduate international students, in particular, mostly used the library as a safe place to study or to do assignments while postgraduate students visited the library to consult subject librarians and borrow library books and journals. In terms of library services, undergraduate respondents were basically in the library to do printing and to make photocopies, while postgraduate respondents often needed to make use of the Inter Library Loan (ILL) service.

The respondents identified other non-library sources consulted for meeting academic needs, such as the Student Counselling Centre, the Student Representative Council (SRC), the Student Funding Centre, and the international student associations to which they belonged. Interestingly, one second year student said that “once I am in Student Counselling Centre, I fill [sic] like I am home with my family and I can ask whatever I want to know” – a comment which underscores the importance of the SCC as a source of information (and presumably counselling) beyond the purely academic.

The Head of the International Student Office (HISO) noted that the orientation programme would provide the international students with the opportunity to know all about the university services available for them, especially “to satisfy their academic needs” she added. Unfortunately, she declared that some of these students, rather than participating in the orientation activities, referred to their relatives and friends for information and advice. The problem with this approach is that relatives and friends might also not have sufficient information because of changes which were taking place over time.

The HISO stated that beyond the orientation programme, the ISO provided international student guides (pamphlets) and the office also encouraged international students to come and ask for information. In this regard, she said that:

Very often they will come for College or Faculty questions or any question about the University. Here, we try to help as much as we can and even if we cannot answer, we will tell them where to go for help.

In addition, the HISO made the point that every international student should pass through the ISO in order to have international clearance which allowed him or her to register for studies

at UKZNP. However, the problem was that some students still did not ask for information and the ISO staff could not identify who was in need of help or who was not.

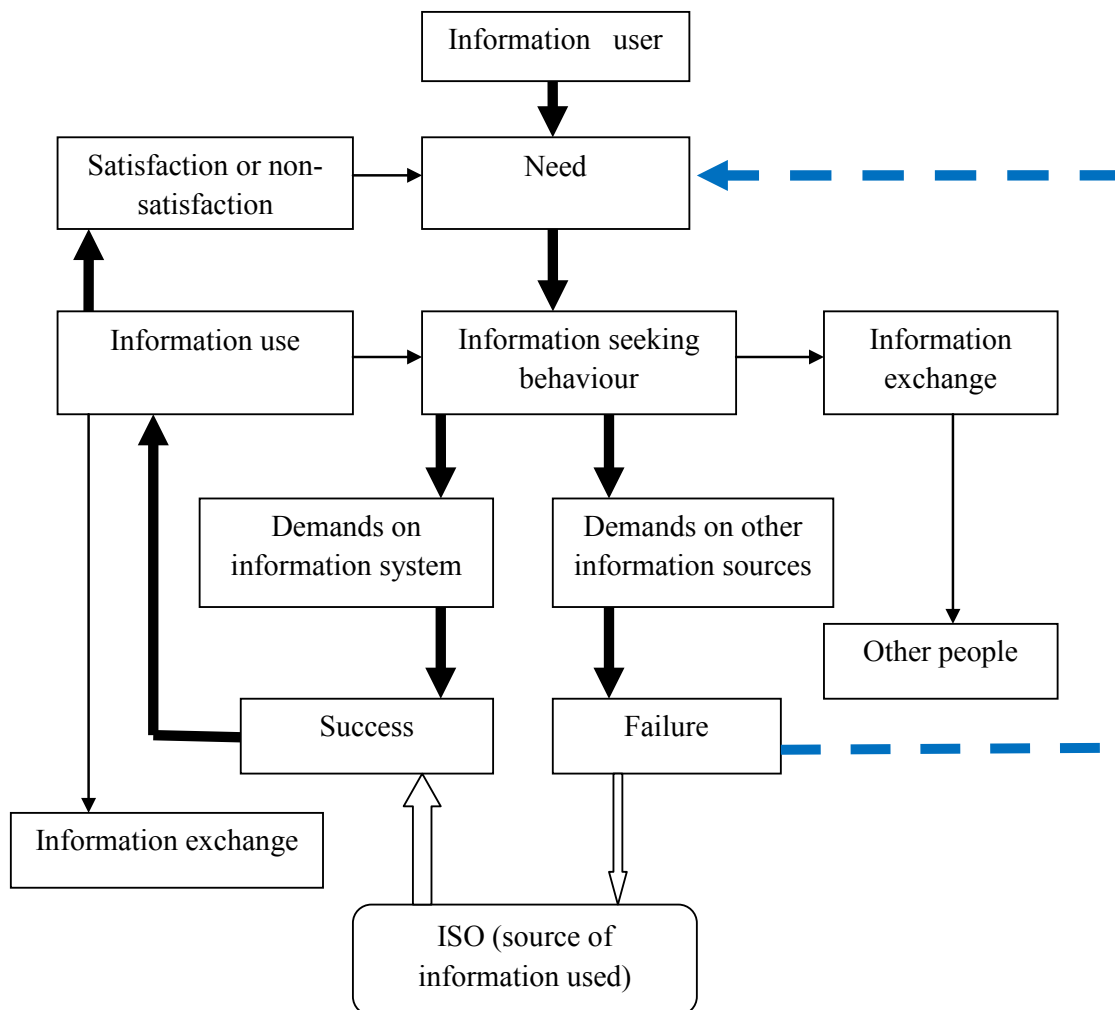
5.4.1.3 Success with information sources consulted

In Section 2.1.2 of the literature review, Wilson (1999: 251) indicated that the information seeker may have either success or failure in finding relevant information. He added that, if successful, the individual (here the international student) then makes use of the information found and may either fully or partially satisfy the perceived need. Failure to satisfy the perceived need mostly leads to the point of restarting the search process.

To illustrate this, a first year international student needed to open a bank account so that her scholarship funds (from her country of origin) could be transferred safely through the electronic banking system. She asked her colleagues (senior students) about the basic documents required by the bank, but the information received from them did not help her. She had been told to go to the bank with a copy of the registration clearance and her passport. However, once at the bank, the customer service officer sent her back to look for a Commissioner of Oaths. This she did the following day obtaining the relevant signature from the Alexandra Road Police Station. When returning to the bank she was served by another person who requested her to also provide an official letter from the university. Finally she obtained a letter from the ISO and managed to open her bank account. Thus, she was able to receive her scholarship funds. The support from the ISO was thus a success (see Figure 5 below which is an adapted form of Wilson's 1999 model as reflected in Figure 1 in Chapter 2) and underscores the important role that the ISO can play in meeting the information needs of international students. It also underscores the point made above that family and friends, when used as sources of information, can be unreliable.

The study revealed that 85.6% of international student respondents satisfied their perceived information needs, but there was no specification of whether they were fully or partially satisfied because the research question did not ask this level of detail. Only 14.4% of respondents indicated that they were not successful. The main problems that influenced information seeking behaviour of international students are identified in Section 5.4.1.4 below.

Figure 5 Success of ISO as one of the sources consulted by an international student



5.4.1.4 Problems experienced by respondents

The findings revealed that the main problems experienced by international students while meeting their information needs related to their academic studies were information literacy (40.4% of respondents) related ones and English language problems (28.8% of respondents). Mu (2007: 575) has suggested implementing information programmes that could develop information literacy skills of the international students for their academic purposes as indicated in Section 2.2.5.3 of the literature review. It is evident that such programmes could be useful to the respondents in the present study.

The English language problem was again highlighted by the international students as a key factor influencing their information seeking behaviour relating to academic needs, as already noted under Section 5.2 of this chapter.

The delay in terms of services delivered to international students was also a problem. This delay included mainly the time needed for renewing a study visa permit from the Department of Home Affairs and the application for medical aid cover from the Ingwe Insurance Company. The insufficient number of ISO staff (only two) impacted on the services delivered especially at the beginning of the academic year given that the number of international students needing assistance would increase at that time.

5.4.1.5 Preferred information format for academic studies

The findings revealed that international students used various information source formats for meeting their academic needs. These formats included electronic, face-to-face, print and audio formats. Generally, the electronic format was the most preferred format for academic purposes and it was suggested by almost a half (42.3%) of respondents. The respondents preferred face-to-face sources when they were consulting their lecturers and other academic supporters such as the Academic Development Office (ADO), mentors and librarians. The face-to-face sources tended to be the more preferred sources used than the print format which was normally based on print books from the library and print notes from lecturers. The audio format was only preferred by 1.5% of respondents and they did not provide any reason for their preference. The reasons why international students preferred a particular source are given below.

5.4.1.6 Reasons for preferring information format

Various reasons why a particular format was preferred were given by the international students. The electronic format was preferred by the respondents for three main reasons: accessibility, ease of use and cost effectiveness. International students maintained that electronic resources were available from remote access without visiting the library physically

and, in addition, the services were available 24 hours a day. As a result, electronic resources allowed the user to minimize the cost in terms of money and time consumption because he/she might get information online at a cheap price or without cost. Ease of use was another reason for choosing electronic resources because some international students recognized the facility of searching by keywords, limiting search results by time (year) or area of study (place or discipline) and using multiple language options while searching for online information. In this regard, a first year student made use of the language option as she was searching for electronic journal articles for her psychology assignment in both English and French.

Face-to-face sources of information were preferred by international students for two main reasons. Firstly, they enabled open discussions with classmates and, secondly, getting quick feedback or answers from lecturers when students were consulting for their assignment topics. Print sources were also acknowledged by international students for two important reasons: permanency or stability of print material and trustworthiness based on knowing the author or publisher of the work which electronic resources often did not have. Print sources were also of use to the international students who stayed off campus as they could take library books home, for example, read them and do their assignments there as they were not able to access the library and LAN overnight (as reflected in Section 4.4.1.4). However, print resources were less preferred than electronic resources.

5.4.2 Information needs related to personal issues

International students mentioned multiple information seeking situations in relation to their academic needs as indicated above. It was considered important to take into account both academic needs and personal issues as both these factors could work hand in hand for good academic performance of international students at UKZN. Thus personal information needs of international students were identified as well as gain making use of the critical incident technique. As with academic needs, this technique was used for the purpose of helping the respondents to remember information needs in relation to their personal issues.

5.4.2.1 Information seeking situations for personal issues

Accommodation was the need most identified by international student respondents. As reflected in Section 4.3.7 a minority (30.7%) of the respondents resided on campus with just under 70% (69.3%) of them staying off campus. Staying off campus was not through choice but due to respondents' failure to get on-campus accommodation. The accommodation need was regarded as a very sensitive problem in that academic work invariably required students to use the library and LAN computers. For instance, a postgraduate international student reported that as he did not get accommodation on campus, he was staying in private accommodation (in town) and was always using public transport to and from campus. He pointed out that the taxis were only available in the early evening. As he was attending classes during the day, the only real opportunity he got for accessing both library databases and websites in one of the LANs was after hours. Due to the need to use "public" transport in the early evening he was unable to do the necessary research and as a consequence was unable to present his research proposal timeously.

Another first year international student complained that when she first arrived she did not know anyone on campus and she was not offered residence accommodation. She was only given a list of landlords of private residences whom she called without any success. She was "forced" to stay in a hotel in the city at great expense (both accommodation and transport) and it was only after two weeks that she managed to find private accommodation close to campus. While this example does underscore the importance of international students doing their "homework" before arriving at UKZN it does illustrate the difficulties that international students can experience that ultimately impacts on their academic performance.

Information about health services provided by UKZN featured among the international student's needs. Two main centres on Campus were identified namely, the Campus Clinic and the Student Counselling Centre. Compulsory medical aid cover issued by one of the South African insurance companies was one of the prerequisites for being able to register. It was also an area of concern on the part of international students in that the application process for the cover could take a long time. In addition it appeared as if some of international students did not properly read the documentation given to foreign students. In this regard, a first year international student ending up paying twice for medical aid cover in that he was required to pay for the cover provided by the South African insurance company

while before he came to university he had already paid for medical aid to one of his home insurance companies. The issue was that foreign insurance companies were not accepted by the UKZN.

A further medical aid issue identified by some of international students was based on the perceived monopoly the Ingwe Insurance Company had. Students were under the impression that this was the only company involved and thus they ended up applying to it. According to the HISO students could get medical aid cover from any South African life insurance company. The HISO pointed to the problem of new students getting information from their senior peers who were in the main using the services of the one company and thus recommended it. Not going beyond their fellow students to the HISO itself as a source of information was limiting their choices with regard to medical cover. The HISO pointed out that thought was being given to selecting a limited number (two or three) of insurance companies which would be allowed to offer medical aid cover to international students from 2012. This would provide for some choice but also for tighter control of the medical aid cover issue.

In terms of family issues, international students were coming from different countries and they did not come with their family members. Most of international students were not even able to go back home for vacation periods because of the high cost of travel, especially those who had to buy air tickets (long distance). Some did not go back home until they had finished their degrees – very difficult given that there are students who are married with young children. However, the Internet facilities provided by the university allowed international students to communicate with their families, especially through email and the use of social networks (as reflected in Section 4.4.2.2).

Other information seeking situations were specified in terms of participating in entertainment (recreational) activities around the campus. Sport is a way of opening up interaction between international students themselves and also with South African students on the other side. Another personal issue referred to by 6% of respondents was language in that to some extent international students were not totally free to engage in exchanging ideas with local students who spoke IsiZulu, a language not understood by the international students. The issue of security was reported by only 3.7% of respondents and it was really connected to the problem of not being accommodated in residence as there was no security assistance provided to off

campus students. Those who were staying in residence could be accompanied at any time of night from the library or LAN to their rooms by security personnel.

5.4.2.2 Sources of information used

The use of information sources was considered as well as other components of information seeking behaviour. Therefore, after identifying the needs of international students in relation to personal issues, the next step was to find out which sources of information they used. Personal needs can be satisfied by consulting both formal and informal sources of information.

Formal sources of information that the international students consulted were dominated by university offices such as the ISO, Student Housing Office, Campus Clinic and Student Counselling Centre. Three other services used were the Student Representative Council (SRC), Sports Union and the international student associations. Electronic sources used for personal needs were based on the use of the Internet (19.3% of respondents), especially searching on websites and sending or receiving email. Google Talk was used by some of the respondents, as was social networking sites such as Facebook and Twitter. Informal sources were characterised by communication with colleagues (classmates and friends) used by 26.5% of respondents and this was the source most used by international students in order to satisfy their personal needs.

5.4.2.3 Success with information source consulted

The sources consulted differed in nature from one source to another. Interestingly, 82% of the respondents found the source of information consulted to be successful for meeting their personal needs and only 18% of respondents did not find the source to be successful.

When asked why the sources were not successful various reasons were given. Respondents referred to outdated information with one example given of a list of landlords provided by the Housing Office which contained incorrect telephone numbers. Another reason was the inability to speak IsiZulu which limited communication with fellow South African students.

Finally, the lack of information literacy was raised in terms of a limited ability to search and properly evaluate electronic resources.

5.4.2.4 Preferred information format for personal issues

International students preferred obtaining information face-to-face rather than consulting electronic and print sources for resolving personal issues. The reason was mainly the ability to have open discussion and be able to share opinions whether to the specific topic or to life in general. For instance, a postgraduate international student stated that “if I am face-to-face, my interlocutor can correct straight the errors or can easily help me to express what is difficult for me”. In addition, a second year international student stated that face-to-face gives her the opportunity to understand information that she may have misinterpreted because it allows her to ask questions for more clarification.

5.5 The International Student Office (ISO) and its services

The ISO has a responsibility of assisting international students registered on campus. In doing so the ISO represents a channel of communication and interconnects the University authorities (advisors) with a significant number of international students studying at the UKZNP.

5.5.1 Awareness of the ISO's services and channels used

The 103 (75.2%) respondents who indicated that they were aware of ISO's services specified how they got to know about those services. Just on 36% of respondents stated that they were informed about ISO services from the Faculty Office. This is perhaps understandable as most international students, once they arrive on campus, first to go to the Faculty Office to try and register before doing anything else. However once getting there, they are informed of the necessity of starting the registration process from the ISO as the first stage of registration.

Twenty eight percent of respondents were informed about the ISO's services by their colleagues who were senior students (returning students) such as classmates, friends and relatives on campus. Twenty six percent of respondents stated that they knew of the ISO's services from the office itself. The HISO highlighted that her office used various strategies for informing the international students about its services such as participating in orientation programmes, using the UKZN Website, international student guides (small handbook) and campus notice boards.

5.5.2 ISO's services considered of use

Three of the four services listed in the questionnaire were regarded as either very useful or useful by a vast majority (80% and above) of the 118 respondents. The faxes and registered mail services were the least useful with just on 62% of respondents indicating their usefulness.

The HISO stated that the international clearance, study visa-permit and medical aid cover services were frequently used by international students because these three services were legal requirements. In other words, these services were specifically designed for assisting international students during their registration on campus and their further stay in South Africa. It was evident that these services had an important impact on the daily life of international students on campus – in both the academic and personal spheres.

5.5.3 Reasons for considering the ISO's services not useful

Almost forty percent of respondents considered faxes and registered mail services not useful. In providing reasons for their rating, they pointed to the irregularity of faxes and registered mail services and the lack of privacy for received messages which were housed in the ISO before being collected by students.

Just on twenty percent of respondents considered the applying for medical aid cover service not useful. They provided the following reasons: insufficient life insurance companies involved (the HISO disagreed with them on this point and she invited the students to ask for

information when they have confusion), length of time for the application to be approved and, finally, the high premiums charged.

Seventeen percent of respondents considered services related to the study visa-permit applications and extensions not useful. They provided the following reasons: the small number of ISO staff (only two) to follow up, the huge delay of getting responses from the Department of Home Affairs and the difficulty of getting support from their Embassy Office.

A minority (10.2%) of respondents considered international clearance services not useful. They provided the following reasons: the delay in receiving the two pre-requested documents, including the study visa-permit from the Department of Home Affairs, the delay in receiving medical aid cover from the insurance company, not being allowed temporary registration while waiting for the above documents. The need for having an international student in the ISO as an advisor because he/she can more easily understand their needs as one of them was pointed to.

5.5.4 Other services the ISO should be providing

Of the 49 respondents who suggested the provision of other ISO's services, eighteen (36.7%) respondents reported the need for the ISO to "follow up" with other service providers, that is, to avoid the likely delay in services delivered to international students. For example, the ISO should more regularly communicate with the Housing Office about accommodation issues. Fourteen (28.6%) respondents suggested the need for regular workshops and meetings on making students aware of available services for them. Nine (18.4%) respondents expressed the need for funding of special events such as cultural and independence days which might facilitate social interaction between local and international students. Eight (16.3%) respondents highlighted the need to make increasing use of GroupWise, the University's email system. Seven (14.3%) respondents raised the issue of reducing the international levy.

5.5.5 Under-utilization of ISO's services

The HISO indicated that since there did not exist a specific measure to determine which service was used, how often and at which level, it was not possible for her to specify which services were under-utilised or not. The Officer indicated that faxes and registered mails were used irregularly. They tended to only be used in times of emergency for example, the serious illness of an international student that needed to be communicated to family members back home. She noted the ISO was looking for funds to support a project to establish a specific resource centre (a room with well equipped computers and information resources) to accommodate the needs of international students and to facilitate interaction for themselves. Whether this would take place or not was still in doubt because of budget constraints and the University restructuring which was underway.

5.5.6 Ways to improve services to international students at UKZNP

Of the 42 respondents who indicated the need to improve services to international students, more than half (54.8%) maintained the necessity of increasing the number of residences at the UKZNP because of the large number of students who could not be accommodated. Just on 43% of respondents indicated that the Registration Appeals Committee should assist both local students and international students. Forty one percent of respondents highlighted the need to allow open competition among life insurance companies to offer medical aid cover to international students (here, as mentioned, the HISO indicated that students were in fact allowed to look for any South African company). Other suggestions presented in terms of improving services were the provision of financial support (bursaries and scholarships) to international students who were struggling financially while they had good academic records, the development of more formal collaboration between the UKZN and the Department of Home Affairs and, finally, the need for having tours around the Campus.

5.5.7 Challenges in the provision of ISO services

The HISO indicated that insufficient funds handicapped provision of some useful information services that could be provided by the ISO. Another challenge was the huge delay in waiting for study visa-permits from the Department of Home Affairs in Pretoria. A third challenge mentioned by the HISO was the students who did not participate in the orientation programmes where much useful information was disseminated. The fourth challenge was the issue of students not willing to ask for help which resulted in their finding themselves in a more difficult situation than they were supposed to be. Finally, the challenge of international students being reminded about the importance of staying up-to-date with their documentation, to read the information available to them and to ask for help whenever they were in need either in terms of their academic work or their personal lives, was pointed to.

5.5.8 Initiatives for service provision

The HISO pointed out that the new University policy regarding international students was almost completed. She indicated that the existing policy was established before the merger between the University of Natal and the University of Durban-Westville underscoring the need for a new policy to reflect the “new” institution. The HISO was, however, concerned that the present restructuring of the University could affect many strategic plans including the new policy. She added that the ISO was in process of making a DVD about the ISO’s services and would continue providing small printed handbooks (student guides).

5.5.9 Cooperation of the ISO with other student services

The ISO maintained close cooperation with other student services on campus, including University management (for example the Faculty Office) and other service providers such as the Housing Office, Campus Clinic and Counselling Centre and even student representatives especially the Student Representative Council (SRC). In this context, the HISO noted that basically all services provided around the campus were designed for every student but

beyond that, the ISO was there for assisting international students on a daily basis because they might face some specific challenges.

5.5.10 Additional comments

Only 12 (less than ten percent) respondents provided further comments and these were categorised in four groups. Since the respondents were allowed to give as many comments as they wanted, multiple responses were received and analysed. There was need to increase on-campus accommodation, more especially for first year international students who are not familiar with the new environment. The second category of comments was based on the importance of awareness of UKZN's support services in general and ISO's services specifically designed for international students. The third category of comments was concerned with the involvement of an international student in services designed for them (for example international student advisor working part-time at the ISO). Additionally, the HISO gave comments that all international students need to know the benefits of arriving on campus on time and their involvement in an orientation programme. She stated that international students need to show an interest in the cultural day held on campus once a year given that it is as an opportunity to share and celebrate diversity. She ended up by saying that she hoped that other events could be arranged with better budget support from the University.

In most cases, the information from the questionnaires and the interview complemented each other. For instance, both international students and the HISO had agreed upon the negative impact of the long registration process for academic studies and personal needs due to the delay of study visa-permit issued by the Department of Home Affairs and poor services related to medical aid cover offered by the Ingwe Insurance Company. However, the HISO denied the issue of a monopoly for applying for medical aid cover. She was also sincerely concerned with the role of the orientation programme in order to make international students aware of the services designed for them; international students were consulting colleagues more than other sources of information around the campus and those provided by the ISO.

5.6 Summary of the Chapter

This chapter comprised a discussion of the findings as contained in Chapter Four. The basis for the discussion was provided by the research questions underpinning the study which revolved around understanding the characteristics of international students at UKZNP, their information needs and information seeking behaviour and how the International Student Office provided support for these students. The discussion of the findings shows that both formal and informal sources of information were consulted by international students. Wilson's 1999 model used for this study successfully reflects that the information seeker (here the international student) may use a variety of information sources, services and systems in an effort to take a decision or to solve a problem. In the concluding chapter which follows, a summary of major results and conclusions are provided and suggestions for further research are made.

Chapter 6 Conclusions and recommendations

6.1 Introduction

The purpose of the study was to identify the information needs and information seeking behaviour of international students on the Pietermaritzburg Campus of UKZN. In this final chapter a summary of the study will be given, conclusions reached will be provided and recommendations will be made in response to the analysis of data and interpretation of results covered in Chapters 4 and 5.

6.2 Revisiting the research questions

International students at the UKZNP experience a range of problems with regard to meeting a variety of information needs in both the academic and personal aspects of their lives, and their information seeking behaviour is affected by a nextensive variety of factors (as indicated in Section 1.2 and also reflected in Chapter 4). Not all problems and information needs are unique to international students but there are several that are specific to international students given the legal requirements for studying in South Africa. Very few studies regarding the information needs of international students have been undertaken in South Africa.

The research questions which underpinned the study are:

- What is the demographic profile and academic level of study of international students at UKZNP?
- What are the languages spoken by international students?
- What kinds of information needs do international students have?
- How do international students obtain the information they need?
- Where do international students find the information they are seeking?

- What problems do international students experience in terms of acquiring information?
- What steps is UKZNP doing to improve services for the international students?
- How can services that are offered to international students be improved?

6.3 Summary of the study

Chapter 1, the introductory chapter, provided a background to the study and an outline of the research problem. This was followed by the purpose of the study and the research questions were given. The significance of the study as well as its scope and limitations were presented. Definitions of key terms used in the study were provided. A further issue discussed was UKZN's policy on international students. Finally, in this chapter, the structure of the study was briefly delineated.

Chapter 2 involved the conceptual framework used for the study and the literature review relating to international students and information seeking behaviour. The conceptual framework was based on Wilson's 1999 model of information behaviour. The Wilson's 1999 model has been successfully used by other researchers, namely, Seyama (2009), Mostert and Ocholla (2005) in South Africa and Yang (2007) in the USA (as indicated in Section 2.1).

In the literature review, the concept of the international student and an overview of the role of international student offices were discussed. The information needs and the sources of information used by international students for academic and personal purposes were identified. The latter included the Internet and electronic databases, the Online Public Access Catalogue (OPAC), librarians, lecturers, colleagues and university offices. The major problems experienced by international students in terms of acquiring information were also identified. These included language, communication, cultural and financial issues, and information literacy skills. This was followed by a review of the scholarly studies on the information seeking behaviour of international students.

The research design and methods adopted in the study were discussed in Chapter 3. The approach that the researcher undertook was a triangulation approach where both quantitative and qualitative data were collected. Instruments used for data collection were a self-

administered questionnaire and semi-structured interview. The validity and reliability of the study were established by pre-testing the questionnaire with four students drawn from the international students enrolled at the UKZNP. The quantitative data was analysed using SPSS version 1.9 and the qualitative data was analysed using thematic content analysis.

In Chapter 4, the results of the survey of 137 international students were presented and in most cases tables were used to present the data. Results of the interview were also presented.

Chapter 5 discussed the results of study which were presented in Chapter 4. The discussion of the findings was considered in the light of the research questions underpinning the study, the literature and the conceptual framework. The study found that the highest percentage of international students used library resources as sources of information in relation to their academic studies, while in terms of satisfying their personal needs the main source of information used was consultation of colleagues.

6.4 Conclusions

The conclusions reached are guided by the research questions of the study. The research questions underpinning the study and the conclusions relating to each question are given. There were important outcomes from the survey of the 137 international students and from the interview with the Head of the International Student Office at the UKZNP and the following conclusion were drawn:

6.4.1 What is the demographic profile and academic level of study of international students at UKZNP?

- Just more than half, 57.7%, of international students who participated in the study were males. IEASA (2012: 15) notes in its 2012 report on higher education that women form more than half of enrolments in higher education institutions in South Africa (57%). Generally, the “younger generation” comprised a large proportion of the total participants of international students. A majority (73%) of the respondents were from the age groups 18-27 years of whom 68% were undergraduates. This is

concomitant with a drive within South Africa to increase the percentage of students in higher education within the 18-24 age group of the population (IEASA 2012: 15). First year international students represented a majority of undergraduate respondents while a minority was in their fourth year. These first year students were not only new to South Africa but also new to the tertiary education environment that was UKZN so would be experiencing many similar 'settling in' problems as any other student new to the higher education environment. 'Settling in' problems however, affect all new students to varying degrees.

- Of the 44 postgraduate students who took part in the study, 19 (42%) had done their undergraduate studies at UKZN. It is presumed that these students would have more knowledge about the information resources available at UKZN than those new to the environment. For those postgraduates new to UKZN, pressures would be high in terms of not only adjusting to the range of new environments that any new student has to, but being competent at accessing and using formal academic resources at a more advanced level and then being able to write a thesis in the English language. Thus these students would need in-depth orientation and support from librarians and lecturers. In other words, the current short library orientation organised by the ISO is insufficient. Further in-depth training, although offered by some departments, needs to be ensured across the range of disciplines in which students are enrolled.

6.4.2 What are the languages spoken by international students?

This question created the opportunity to have some understanding of the linguistic impact on information seeking given that English is the official language used at UKZNP. Country of origin and home language were investigated.

- Just on 95% of respondents were from African countries and the rest of respondents were from the USA. Zimbabwe represented almost a half of respondents from African continent. This supports the statistics provided by IEASA (2012: 9) that indicates that almost 72% of international students come from SADC countries where English is commonly spoken even though it is not the mother tongue. The main home languages for Zimbabweans are Shona and Ndebele and thus these were the most common

languages listed as home languages by participants. The Ndebele language has a linguistic link with IsiZulu (a language spoken by many students at UKZNP).

- The major language problem for participants was a problem with the English language which was low proficiency in the use of English. The study supports the necessary role of a compulsory English test for foreign applicants to UKZN, in order to determine support to be provided by the UKZNP English Language Centre. Problems of language and in particular the use of English are not unique to foreign students as most South Africans do not have English as the mother tongue and are faced with English as the medium of instruction at UKZN.

6.4.3 What kinds of information needs do international students have?

This was a key question. Information needs of international students were grouped into two main categories, namely, academic needs and personal issues. The critical incident technique was then used to identify information seeking situations in relation to these two categories.

- Academic information needs centred on the registration process (32% of respondents) (including legal requirements such as a study visa permit, medical aid cover and international clearance) followed by issues relating to lectures, tests, assignments, research and theses (combined total of 58% of respondents). The study did not flesh out the detail of the nature of needs with the above issues.
- Information needs of international students in terms of their personal issues were dominated by two major information seeking situations, namely accommodation (less than a third of respondents were staying in on-campus residences) and health issues (reflecting medical aid cover services). In terms of accommodation issue, the HISO pointed out that “local students are not given preference in terms of accommodation on campus” and thus the international students are not prejudiced in terms of gaining access to on-campus accommodation. Medical aid cover is a need particular to international students. Family issues were also listed due to the fact that international

students were staying far away from their family members while they were studying at UKZNP.

6.4.4 How do international students obtain the information they need?

This question ascertained information on the respondents' preferred format of information sources.

- The study found that a wide variety of resources were consulted in order to meet academic information needs and the preferred format appeared to be direct personal contact. Responses were grouped into no less than 13 categories of sources and these ranged from predominantly face-to-face facilities offered such as the ISO, Student Counselling and the Students Representative Council, people contacts such as lecturers and librarians to formal information sources such as library resources. In terms of meeting academic needs via published information resources, 42.3% of respondents preferred the electronic format to print format, print being preferred by just on a quarter of respondents. The main reason for this preference was based on ease of accessibility and usability, minimal cost of the electronic format rather than only relying on stability of print format and restricted library hours. From the 203 responses provided it is clear that the respondents used multiple sources of information depending on the nature of the information need. Library resources and services were the most commonly sought sources of formal information.
- A majority of respondents indicated that their information needs were met by the options available to them to consult although the degree of success was not indicated. Problems related not directly to the sources of information themselves but rather to information literacy and English language (60% of responses) thus indicating a need for enhanced support in these areas.
- The study revealed that in relation to personal issues experienced by international students, most respondents used campus facilities and colleagues to resolve such problems. When asked about the preferred format for answering personal information needs, an almost equal number of respondents answered 'electronic format' and 'face-

to-face format' which somewhat contradicts the answers provided in terms of preferred sources of information. It is not clear how respondents interpreted this question. It is possible that a face-to-face consultation had various dimensions such as an online form or email being a follow up to an initial query. The main reason for face-to-face preference was the potential for open discussion and quick feedback.

6.4.5 Where do international students find the information they are seeking?

This question is closely related to the previous one. This question enabled one to identify sources used by international students in order to understand their information seeking behaviour.

- In terms of formal academic needs, the study found that the top source of information used was the library; which makes sense given that the library is the central source of academic literature and in particular subscription literature in print and online. The Faculty Office was used mostly for registration and changing courses (subjects) from one study discipline to another. The Internet was another source used by almost half of international students who used library resources in relation to their academic needs although it is not clear how respondents interpreted what was meant by the concept of the Internet.
- Interestingly, lecturers, librarians and colleagues were used for academic purposes at the same level of consultation. Face-to-face contact provides the opportunity for direct feedback as well as discussion. This could also help to understand the important point of consulting a variety of information sources in order to do academic work properly. For instance after the lecturer has explained the assignment topic, the next step might be to go to the library and look for assistance from librarians.
- Personal information needs were predominantly met by face-to-face interactions with colleagues and formal facilities such as the various information offices available on campus.
- In terms of success or failure in making use of the information found to satisfy the perceived need, if successful the need is (obviously) satisfied and if not successful,

the failure to satisfy the perceived need mostly leads to the point of restarting the search process (Wilson 1999: 251). Section 5.4.1.3 justified the applicability of the Wilson's 1999 model to the present study whereby international students could consult multiple sources of information at different steps in order to satisfy their perceived needs (see Figure 5 above).

6.4.6 What problems do international students experience in terms of acquiring information?

This question was asked to determine the challenges experienced by international students in their information seeking process.

- Almost three quarters (69.2%) of the problems experienced by international students were either based on the lack of information literacy skills or the English language. Information literacy impacted on their ability to browse the Internet and search library databases to obtain relevant academic resources (this could explain the importance of strengthening the library training programme). English also impacted on their ability to understand technical terms used by lecturers (vocabulary and grammar problems and this could justify the use of English test results for decision making).
- The next most significant problem for international students was the delay in terms of services rendered to international students such as medical aid coverage, obtaining visas and so forth which are legal requirements. Some of these matters are beyond the control of the University. For example, the study visa permit took a long time to get from the Department of Home Affairs in Pretoria. These issues are unique to international students.

6.4.7 What steps is UKZN undertaking to improve services for the international students?

This question was asked to determine whether there were any current initiatives for improving information services provided by UKZN to international students.

The Head of the International Student Office (HISO) indicated that the Office makes international students aware of available services through the following strategies:

- During orientation for international students each semester and through the issuing of international student guides (handbooks) even if the international student arrived to study after the orientation programme.
- The HISO pointed out that the new policy regarding international students was almost completed. She expected the new policy which would reflect the new institution to be implemented in the 2012 academic year.

6.4.8 How can services that are offered to international students be improved?

This question contributed toward providing appropriate recommendations by the respondents given in the section below.

- More than half, 58.3% of the 42 respondents who provided suggestions reported the necessity of increasing University's residences because of the large number of students who cannot be accommodated. These students were not able to use the library and LAN overnight because of the often long distance between their private accommodation and campus. In addition, transport and security are not arranged for this category of student.
- Generally, the study revealed that both the ISO and international students have a gap to bridge in terms of providing and acquiring information. For instance, a majority of international students became aware of ISO services through the Faculty Office rather than from the ISO itself. It appeared that there was a lack of coordination in terms of the ISO informing students about the multiple sources of information and services available to them and what was particularly relevant such as attending the orientation programme for international students.

6.5 Recommendations

In the light of the findings of the previous chapters and the conclusions made above, the following recommendations are made to assist in improving information services rendered to international students at UKZN. This will be followed by recommendations for further research.

- Registration is a complex process as it involves many legally required documents provided by various offices (both on and off campus). Offices off campus which include the Department of Home Affairs (study visa-permit) and the South African life insurance companies (medical aid cover) take a long time to deliver their services. Offices on campus, namely the International Student Office (international clearance), Student Funding Centre (financial clearance) and the Faculty Office (registration clearance) are characterized by long queues especially during the first few days of each semester. Given the complexity pointed to above, international students cannot fulfil all these requirements within a few days, and it is suggested that they should be allowed to have temporary registration, for example a month, to sort out the registration process (especially first year international students).
- It is evident that information literacy skills are a basic requirement not only for good academic performance but for problem resolution outside of the academic sphere. It is also evident that international students enrolled at UKZN and in particular first years are struggling because of their limited (if any) and varied information literacy skills. In this regard, information literacy which is offered as an elective subject should be changed to being a compulsory subject for every first year and new student.
- Postgraduate international students who did their undergraduate studies at a university other than UKZN tend to struggle in terms of making proper use of the resources available at UKZN for their dissertations. Consideration is given by the library to designing library orientation programme which introduces these students to the many resources both in print and electronic format available to them. In many instances this is just an orientation, what is needed is more time for formal training. Alternatively

special library orientation and training programmes could be adapted and further consideration could be given to making attendance compulsory.

- English is the official language used at UKZNP. Irrespective of whether one is doing undergraduate or postgraduate study, it is necessary to understand one's lecturers, communicate with supervisors and access the various resources which are in print and electronic format. The initiatives which are in place (for example the English competency test) need to continue and consideration needs to be given to how students with less than ideal English skills can be supported in their academic endeavour in addition to the provision of formal language courses.
- Accommodation is a critical problem experienced by many international students. The UKZN could increase the number of residences available. Consideration could be given to the Student Housing Office giving priority to first year international students in particular when allocating the rooms. However, new international students have to apply separately for university accommodation (on time) and also the returning international students should confirm their residences before they leave for holidays.
- International students need to be made better aware of the benefits that accrue by arriving on campus on time and by their involvement in an orientation programme designed specifically for them at the beginning of each semester.
- The International Student Office has insufficient staff (only two) compared to the large population of international students to be served. The UKZN could employ more people within this Office. It is suggested that a senior international student could be involved in terms of service delivery through the hiring of a student as an advisor working part-time at the ISO and this person would help the ISO's staff to provide at appropriate times the necessary services needed by international students.

6.6 Suggestions for further research

The following further studies are suggested:

- Given that some international students are not aware of the services designed for them around the campus, it is suggested that a study should be conducted to find out the reasons for this lack of awareness.
- It is also suggested that similar studies be replicated at other residential universities with international student cohorts to determine whether similar results will be forthcoming and how these institutions are dealing with the information related issues of such students.
- The Library is the most heavily used resource by international students for meeting their academic needs. It is thus suggested that an in-depth study be done to investigate the international students' perceptions and use of the Library at UKZNP.

6.7 Summary of the Chapter

This chapter provided an overview of the entire study into the information needs and information seeking behaviour of international students at the University of KwaZulu-Natal, Pietermaritzburg campus. The research problem and research questions were revisited and the major research findings were presented. Conclusions about the findings were formulated. Recommendations for improvements to services for international students as well as recommendations for further research were also provided. Recommendations were made which could reflect the role and responsibility of either UKZNP as an information service provider or international students as information seekers. The participation of international students in the orientation programme is repeatedly pointed out to be important in the sense that all service providers usually explain their potential services reserved for international students. Finally, suggestions for further studies were made.

List of works cited

- Abdoulaye, K. 2002. Information seeking behaviour of African students in Malaysia: a research study. *Information Development* 18(3): 191-196.
- Allen, M. B. 1993. International students in academic libraries: a use survey. *College and Research Libraries* 54(4): 323-333.
- Asah, F. 2000. A report on information needs assessment of international students at the University of KwaZulu-Natal, Pietermaritzburg Campus: University of KwaZulu-Natal. PGDIS research project. Pietermaritzburg: Information Studies Programme.
- Babbie, E. and Mouton, J. 2001. *The practice of social research*. South African ed. Oxford: Oxford University Press.
- Baker, T. L. 1988. *Doing social research*. New York: MacGraw-Hill.
- Bane, A. F. and Milheim, W. D. 1995. Internet insights: how academics are using the Internet. *Computers in Libraries* 15(2): 32-36.
- Baron, S. and Strout-Dapaz, A. 2001. Communicating with and empowering international students with a library skills set. *Reference Services Review* 29(4): 314-326.
- Belkin, N. J., Oddy, R. and Brooks, H. 1982. A SK for information retrieval: background theory. *Journal of Documentation* 38(2): 61-71.
- Bell, J. 1999. *Doing your research project: a guide to first-time researchers in education and social science*. 3rd ed. Buckingham: Open University Press.
- Ben-Haim, Y. 2006. *Info-gap decision theory: decisions under severe uncertainty*. Amsterdam: Elsevier.
- Bilal, D. M. 1989. International students' acquisition of library research skills: relationship with their English language proficiency. *Reference Librarian* 10(24): 129-145.
- Botha, M. M. 2010. Compatibility between internationalising and Africanising higher education in South Africa. *Journal of Studies in International Education* 14(2): 200-213.

- Brookes, E. H. and Webb, C. de B. 1965. *A history of Natal*. Pietermaritzburg: University of Natal Press.
- Brown, C. 2000. Reference services to the international adult learner: understanding the barriers. *Reference Librarian* 33(69/70): 337-343.
- Brux, J. M. and Fry, B. 2009. Multicultural students in study abroad: their interests, their issues, and their constraints. *Journal of Studies in International Education* 14(5): 508-527.
- Burns, R. D. 1991. Study and stress among first year overseas students in an Australian university. *Higher Education Research and Development* 10(1): 61-67.
- Busha, C. and Harter, P. 1980. *Research methods in librarianship: techniques and interpretation*. New York: Academic Press.
- Case, D. O. 2002. *Looking for information: a survey of research on information seeking, needs, and behaviour*. Amsterdam: Academic Press.
- Chisa, K. 2004. A report on information seeking needs of international students at the University of KwaZulu-Natal, Pietermaritzburg Campus: University of KwaZulu-Natal. PGDIS research project. Pietermaritzburg: Information Studies Programme.
- Cleaver, B. P. 1987. Thinking about information skills for life-long learning. *School Library Media Quarterly* 16(1): 29-31.
- Cone, J. D. and Foster, S. L. 1998. *Dissertation and theses: from start to finish*. London: American Psychology Association.
- Creswell, J. 1994a. *Research design*. London: Sage.
- Creswell, J. 1994 b. *Research design: qualitative and quantitative approaches*. Thousand Oaks, CA: Sage Publications.
- Creswell, J. W., Fetters, M. D. and Ivankova, N. V. 2004. Designing a mixed methods study in primary care. *Annals of Family Medicine* 2(1): 7-12.
- Czaja, R. and Blair, J. 2005. *Designing surveys: a guide to decisions and procedures*. 2nd ed. London: Sage.

- Daly, A . 2011. D eterminants of pa rticipating i n A ustralian uni versity s tudent e xchange programs. *Journal of Research in International Education* 10(1): 58-70.
- Davies, J . E . 2007. A n overview of i nternational r esearch i nto t he library and i nformation needs of visually impaired people. *Library Trends* 55(4): 785-796.
- Davis, G. R. 2000. Information seeking behaviour of undergraduate students: do information retrieval systems meet their needs? In ProLISSA: proceedings of the first biannual DISSAnet Conference “Southern African LIS research in progress”, Pretoria, 26-27 October 2000: 55-63.
- De Vos, A. S. (ed.) 2002. *Research at grassroots: for the social science and human services professions*. 2nd ed. Pretoria: Van Schaik.
- Dervin, B. 1992. From the mind’s eye of the user: the sense-making qualitative-quantitative methodology. In: Glazier, J. D. and Powell, R. R. (eds.) *Qualitative research in information management*. Englewood: Libraries Unlimited. Pp. 61-84.
- Dunne, C. 2009. H ost s tudents’ perspectives of i ntercultural c ontact i n an Irish U niversity. *Journal of Studies in International Education* 13(2): 222-239.
- Ellis, D . 1989. A b e haviour a pproach t o i nformation r etrieval de sign. *Journal of Documentation* 45(3): 171-212.
- Feather, J . a nd Sturges, P . (eds.) 1997. *International encyclopaedia of information and library science*. London: JAI Press.
- Foley, O. 2010. An investigation into the barriers faced by international students in their use a small Irish Academic Library. MSc. thesis. Department of Information Studies, Institute of Technology, Aberystwyth University. Carlow: Ireland.
- Gay, L. 1976. *Education research: competencies for analysis and application*. 5th ed. Columbus, Ohio: Merrill.
- Glesne, C. and Peshkin, A. 1992. *Becoming qualitative researchers: an introduction*. White Plains, N.Y.: Longman.
- Gravetter, F . J . a nd F orzano, Lori-Ann B. 2009. *Research methods for the behavioural sciences*. 4th ed. Wadsworth: Cengage Learning.

- Gummesson, E. 2000. *Qualitative methods in management research*. 2nd ed. London: Sage.
- Heather, P. and Stone, S. 1985. *Questionnaires*. Sheffield: University of Sheffield, Centre for Research on User Studies.
- Held, D. et al. 1999. *Global transformation: politics, economics and culture*. Cambridge: Policy Press.
- Holstein, J. A. and Gubrium, J. F. (eds.) 2003. *Inside interviewing: new lenses new concerns*. London: Sage.
- Hughes, H. 2005. Actions and reactions; exploring international students' use of online information resources. *Australian Academic and Research Libraries* 36(4): 169-179.
- Hussey, J. and Hussey, R. 1997. *Business research: a practical guide for undergraduate and postgraduate students*. London: Macmillan Press.
- Ikoja-Odongo, R. and Mostert, J. 2006. Information seeking behaviour: a conceptual framework. *South African Journal of Libraries and Information Science* 72(3): 145-158.
- Institute of International Education. 2009. Report on record numbers of international students in US higher education. Washington, D.C.: National Press Club.
<<http://www.wystc.org/docs/blog/?p=943>> 07/03/2011.
- International Education Association of South Africa. 2012. *Study South Africa: a guide to South African higher education*. Pretoria: IEASA
<http://www.ieasa.studysa.org/11thonline/book/24.html?page=1> 02/02/2012
- Jackson, P. A. 2005. Incoming international students and the library: a survey. *Reference Service Review* 33(2): 197-209.
- Kaniki, A. M. 1995. Exploratory study of information needs in the Kwa-Ngwanase (Natal) and Qumbu (Transkei) communities of South Africa. *South African Journal of Library and Information Science* 63(1): 9-18.
- Kaniki, A. M. 2001. Community profiling and needs assessment. In Stilwell, C., Leach, A. and Burton, S. (eds.) 2001. *Knowledge, information and development: an African perspective*. Pietermaritzburg: University of KwaZulu-Natal. Pp. 187-199.

Kishun, R. 2006. *The internationalisation of higher education in South Africa*. Durban: International Education of South Africa.

Kishun, R. 2007. The internationalisation of higher education in South Africa: progress and challenges. *Journal of Studies in International Education* 11(3/4): 455-469.

Korobili, S., Malliari, A. and Zapounidou, S. 2011. Factors that influence information seeking behaviour: the case of Greek graduate students. *Journal of Academic Librarianship* 37(2): 155-165.

Kothari, C. K. 2004. *Research methodology: methods and techniques*. 2nd ed. New Delhi: New Age International.

Krejcie, R. V. and Morgan, D. W. 1970. Determining sample size for research activities. *Education and Psychological Measurement* 30(3): 607-610.

<http://apps.isiknowledge.com/summary.do?qid=1&product=WOS&SID=N1j58pK7cjd1F3K4pik&search_mode=GeneralSearch> 11/05/2011.

Kudo, K. and Simkin, K. A. 2003. Intercultural friendship formation: the case of Japanese students at an Australian university. *Journal of Intercultural Studies* 24(2): 91-114.

Kuhlthau, C. C. 1991. Inside the search process: information seeking from the user's perspective. *Journal of the American Society for Information Science* 42(5): 361-371.

Kumar, S. L. and Suresh, R. S. 2000. Strategies for providing effective reference for adult learners. *Reference Librarian* 33(69/70): 327-336.

Leder, G. C. and Forgasz, H. J. 2004. Australian and international mature students: the daily challenges. *High Education Research and Development* 23(2): 183-198.

Leedy, P. 1997. *Practical research: planning and design*. 6th ed. Upper Saddle River, NJ: Merrill/Prentice Hall.

Letsoalo, P. 2006. A report on information needs assessment of international students at the University of KwaZulu-Natal, Pietermaritzburg Campus: University of Kwa Zulu-Natal. PGDIS research project. Pietermaritzburg: Information Studies Programme.

Lewis, P., Thornhill, A. and Saunders, M. 2003. *Employee relations: understanding the employment relationship*. Harlow: Prentice-Hill.

- Lewis-Beck, M. S. 1994. *Research practice*. London: Sage.
- Lewthwaite, M. 1996. A study of international students' perspectives on cross-cultural adaptation. *International Journal for the Advancement of Counselling* 19(2): 167-185.
- Liao, Y., Finn, M. and Lu, J. 2007. Information-seeking behaviour of international graduate students vs. American graduate students: a user study at Virginia Tech 2005. *College and Research Libraries* 68(1): 5-25.
- Locke, L. F., Silverman, S. J. and Spirduso, W. W. 1998. *Reading and understanding research*. Thousand Oaks, CA: Sage.
- Majid, S. and Kassim, G. M. 2000. Information seeking behaviour of international Islamic University of Malaysia Law Faculty members. *Malaysian Journal of Library and Information Science* 5(2): 1-17.
- Mangan, J., Lalwani, C. and Gardner, B. 2004. Combining quantitative and qualitative methodologies in logistics research. *International Journal of Physical Distribution and Logistics Management* 34(7): 565-578.
- <http://www.adolphus.me.uk/emx/research_design/triang1_files/p565.htm> 5/09/2011.
- Marais, M. A. Head: International Student Office. 2011. Interviewed by the author in Pietermaritzburg, 1st August.
- Mkhwebu, S. 2008. A report on information needs assessment of Zimbabwean first year students at the University of Kwa Zulu-Natal, Pietermaritzburg Campus: University of KwaZulu-Natal. PGDIS research project. Pietermaritzburg: Information Studies Programme.
- Moloi, K. C., Gravett, S. J. and Petersen, N. F. 2009. Globalisation and its impact on education with specific reference to education in South Africa. *Educational Management, Administration and Leadership* 37(2): 278-297.
- Mostert, J. and Ocholla, D. 2005. Information needs and information seeking behaviour of parliamentarians in South Africa. *South African Journal of Libraries and Information Science* 71(2): 136- 150.
- Mpinganjira, M. 2011. Why choose South Africa? Insights from international undergraduate students. *African Journal of Business Management* 5(6): 2180-2188.

- Mu, C. 2007. Marketing academic library resources and information services to international students from Asia. *Reference Services Review* 35(4): 571-583.
- Muhambe, B. H. 2009. A report on information needs assessment of international students at the University of KwaZulu-Natal, Pietermaritzburg Campus: University of KwaZulu-Natal. PGDIS research project. Pietermaritzburg: Information Studies Programme.
- Muller, J., Cloete, N. and Badat, S. (eds.) 2001. *Challenges of globalisation: South African debates with Manuel Castells*. Cape Town: Maskew Miller Longman.
- Nachmias, D. and Nachmias, C. 1982. *Research methods in the social sciences: alternate second edition without statistics*. London: Edward Arnold.
- Neeruputh, S., Leach, A. and Hoskins, R. 2006. Towards establishing guidelines for performance appraisal of subject librarians in KwaZulu-Natal academic libraries. *Mousaion* 24(1): 51-74.
- Neuman, W. L. 2000. *Social research methods: qualitative and quantitative approaches*. 4th ed. Boston: Allyn and Bacon.
- Neuman, W. L. 2009. *Understanding research*. Boston: Pearson.
- Newell, R. 1993. Questionnaires. In: Gilbert, N. (ed.) *Researching social life*. London: Sage. Pp. 94-115.
- Ngulube, P. 2003. Preservation and access to public records and archives in South Africa. PhD thesis. Pietermaritzburg: University of Natal.
- Ngulube, P. 2005. Research procedures used by Master of Information Studies students at the University of Natal in the period 1982 -2002 with special references to their sampling techniques and survey response rates: a methodological discourse. *International Information and Library Review* 37(2): 127-143.
- Nicholas D. 2000. *Assessing information needs: tools and, techniques and concepts for the Internet age*. 2nd ed. London: Aslib.
- Ohmae, K. 2005. *The next global stage: challenges and opportunities in our borderless world*. Bergen County, NJ: Wharton School Publishing.

- Onwuegbuzie, A. J. 1997. Academic library usage: a comparison of native and non-native English-speaking students. *Australian Library Journal* 46(3): 258-70.
- Pather, R. 2004. A comparative study of costs and benefits of journal ownership versus full-text electronic access in the Faculty of Science at the University of Natal, Durban, Libraries. MIS thesis. Pietermaritzburg: University of KwaZulu-Natal.
- Powell, R. 1991. *Basic research methods for librarians*. 2nd ed. Norwood: Ablex.
- Powell, R. 1997. *Basic research methods for librarians*. 3rd ed. Greenwich: Ablex.
- Robson, C. 1993. *Real world research: a resource for social scientists and practitioner-researchers*. Oxford: Blackwell.
- Rose, D. and Sullivan, O. 1993. *Introducing data analysis for social scientists*. Buckingham: Open University Press.
- Saracevic, T. and Wood, J. B. 1981. *Consolidation of information: a handbook on evaluation, restructuring and repackaging scientific and technical information*. Paris: UNESCO.
- Sarantakos, S. 1998. *Social research*. 2nd ed. London: MacMillan Press.
- Saunders, M., Lewis, P. and Thornhill, A. 2003. *Research methods for business students*. 3rd ed. Harlow: Prentice Hall.
- Schutt, R. 1996. *Investigating the social world: the process and practice of research*. Thousand Oaks, CA.: Pine Forge Press.
- Schoole, C. 2006. Internationalisation of higher education in South Africa: a historical review. *Perspectives in Education* 24(4): 1-13.
- Seyama, L. G. 2009. Information seeking behaviour of students with visual impairments: a case study of the University of KwaZulu-Natal, Pietermaritzburg. MIS thesis. Pietermaritzburg: University of KwaZulu-Natal.
- Siddiqui, S. 2011. Information seeking behaviour of B. Tech. and M.B.B.S. students in Lucknow: a comparative study. *Journal of Library and Information Science* 1(1): 55-70. <http://irjlis.com/pdf_v1n1_jun2011/IR016.pdf> 11/08/2011.

- Simba, C. A. 2006. User perceptions of the quality of service at Iringa University College Library, Tumaini University, Tanzania. M. IS thesis. Pietermaritzburg: University of KwaZulu-Natal.
- Smart, D., Volet, S. and Ang, G. 2000. *Fostering social cohesion in universities: bridging the culture divide*. Canberra: Australian Education International.
- Song, Y. 2004. A comparative study on information-seeking behaviours of domestic and international business students. *Research Strategies* 20(1-2): 23-34.
- Stilwell, C. 1991. The community library as an alternative to the public library in South Africa. MIS thesis. Pietermaritzburg: University of Natal.
- Stilwell, C. 2000. Venturing into academic journal publishing: some issues and guidelines for new authors. *African Journal of Archives and Information Science* 10(2): 167-175.
- Stilwell, C. 2004. Guiding doctoral dissertations: some issues. Unpublished guidelines. Pietermaritzburg: University of KwaZulu-Natal.
- Tam, W., Cox, A. M. and Bussey, A. 2009. Student user preferences for features of next-generation OPACs: a case study of University of Sheffield international students. *Program: Electronic Library and Information Systems* 43(4) 349-374.
- Terre Blanche, M. and Durrheim, K. (eds.) 1999. *Research in practice: applied methods for the social sciences*. Cape Town: University of Cape Town Press.
- Terre Blanche, M., Durrheim, K. and Painter, D. 2006. *Research in practice: applied methods for the social sciences*. Cape Town: University of Cape Town Press.
- UKZN. 2004. Mission statement. < <http://www.ukzn.ac.za/About-UKZN/ukzn-vision-mission.aspx>> 07/03/2011.
- UKZN. 2011a. Institutional profile and brief description of UKZN. <http://www.ukzn.ac.za/About-UKZN/brief_description_of_UKZN.aspx> 22/08/2011.
- UKZN. 2011b. International relations. < <http://ukzninternational.ukzn.ac.za/international-relations/staff-contact-details.aspx>> 26/08/2011.
- Understanding Research. 2004. *An introduction to reading research*. 2nd ed. Pietermaritzburg: School of Education, Training and Development, University of KwaZulu-Natal.

- UNESCO Institute for Statistics. 2009. *Global education digest: comparing education statistics across the worlds*. Paris: UNESCO.
- Wang, J. and Frank, D. G. 2002. Cross-cultural communication: implications for effective information services in academic libraries. *Portal-Libraries and the Academy* 2(2): 207-216.
- Ward, C. and Masgoret, A. M. 2004. International students: studying and staying on in New Zealand. <<http://www.dol.govt.nz/PDFs/international-students2007.pdf>> 26/08/2011.
- Ward, C., Bochner, S. and Furnham, A. 2001. *The psychology of culture shock*. 2nd ed. Hove, UK: Routledge.
- Welman, C., Kruger, F. and Mitchel, B. 2005. *Research methodology*. 3rd ed. Cape Town: Oxford University Press.
- Werner, A. 2004. *A guide to implementation research*. Washington, D.C.: Urban Institute Press.
- Williams, A. 2003. How to write and analyse a questionnaire. *Journal of Orthodontics* 30(3): 245-252. <<http://jorthod.maneyjournals.org/content/vol30/issue3/>> 2/03/2011.
- Wilson, T. D. 1981. On user studies and information needs. *Journal of Documentation* 37(1): 3-15.
- Wilson, T. D. 1994. Information needs and uses: fifty years of progress? In: Vickery, B. C. (ed.) *Fifty years of information progress: a Journal of Documentation review*. London: Aslib. Pp. 15-51.
- Wilson, T. D. 1997. Information behaviour: an interdisciplinary perspective. *Information Processing and Management* 33(4): 551-572.
- Wilson, T. D. 1999. Models in information behaviour research. *Journal of Documentation* 55(3): 249-270. <<http://informationr.net/tdw/publ/papers/1999JDoc.html>> 24/02/2011.
- Wilson, T. D. and Walsh, C. 1996. *Information behaviour: an interdisciplinary perspective*. Sheffield: University of Sheffield, Department of Information studies.
- Wisker, G. 2001. *The postgraduate research handbook: succeed with your MA, Mphil, EdD and PhD*. Basingstoke: Palgrave.

Yang, L. 2007. A study of information seeking behaviour of international students for career decision making at the University of Tennessee, Knoxville.

<<http://www.cci.utk.edu/files/u14/yang.pdf>> 08/08/2011.

Yi, Z. 2007. International student perceptions of information needs and use. *Journal of Academic Librarianship* 33(6): 666-673.

Appendix 1: Letter of consent for the international students

5 October 2011

I, Moïse Majyambere, am a student currently registered for a Masters of Information Studies Degree at the Pietermaritzburg campus of the University of KwaZulu-Natal (UKZN). The topic of my thesis is: “ **The information needs and information seeking behaviour of international students at the University of KwaZulu-Natal, Pietermaritzburg Campus.**”

You are invited to participate in the research which will be conducted in my personal capacity. The purpose of this study is to identify the information needs and information seeking behaviour of international students. The research will assist in determining whether the services that are provided by the University meet your information needs or not, and to identify problems that you come across as you seek information. The findings may be able to assist the university to improve information delivery systems and at the same time, contribute to ensuring the quick and easy integration of international students at UKZNP Campus.

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. Please note that your name will not be included in the report and your confidentiality will be maintained throughout the study.

Your participation in answering the questions is completely voluntary. You have the right to withdraw at any time during the study. I appreciate the time and effort it would take to participate in this study.

Thank you.

Yours sincerely,

Moïse Majyambere

Email: 208524104 @ukzn.ac.za

Please complete this form

I..... (Full names of participant)
hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participate in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

Signature of Participant:

Date:

Email:

Appendix 2: International student's questionnaire

I am a student at the University of KwaZulu-Natal, Pietermaritzburg Campus studying towards a Master of Information Studies Degree. **The purpose of my research is to identify the information needs and information seeking behaviour of international students on the Pietermaritzburg Campus of UKZN.** The findings may be able to assist the University to improve information delivery systems and at the same time, contribute to ensuring the quick and easy integration of international students at UKZN Campus.

I will be extremely grateful if you could assist me in this endeavour by answering the following questions. The time for completing the questionnaire will be approximately 15 minutes. Your answers will be kept confidential.

Instructions for completing the questionnaire

- a. Unless otherwise instructed, please place a tick or a cross in the space provided.
- b. Where you are required to answer in your own words, please use the space provided.

Section 1- Background information

1. Gender
0..... Male
1..... Female
2. Age 18-22 23-27 28-32 33-37 38-42 43+
3. What is your country of origin?
4. What is your home language?
5. Given that English is the official language at UKZN do you encounter any language problems with your studies at this institution?
0..... Yes
1..... No (If no please go to Q 8)
6. Could you briefly explain the type of problem(s) you encounter?
.....
.....
7. Are you doing anything to resolve this (these) problem (s)?
0..... Yes
1..... No

If yes please briefly describe what you are doing.

.....
.....
.....

8. What is your present level of study?

0..... Undergraduate (please specify year of study).....

1..... Postgraduate. Please specify the institution where you did your undergraduate studies.....

9. What category of international student are you?

0..... Normal degree programmes

1..... University exchange programmes

10. Where are you staying?

0..... Off campus

1..... University residence.

Section 2 - Information needs and information seeking behaviour of international students

While at UKZN there are essentially two types of needs – one related to academic studies (for example, registration process, lectures, assignments etc.); and the other related to personal issues (such as family, accommodation, health, recreational activities, etc.) The purpose of this section is to find out from you what important situation or instance you experienced this year, and what kind of things you needed to find out, learn or know in this situation. For example, you may have needed to make a decision, find an answer to a question, solve a problem or try to understand something.

A. First of all an information seeking situation/ critical instance in relation to your academic studies

11. Please describe a major situation/instance that required you to find information related to your academic studies at UKZN?

.....
.....
.....

12. How or where or from whom did you go about finding information to resolve the situation/instance? (If applicable you may give more than one source of information.)

.....
.....

.....
.....
13. Were you successful?

0..... Yes

1..... No
.....
.....
.....

14. What problems did you encounter?
.....
.....
.....
.....

15. In relation to satisfying information needs concerning your studies which information format is the most preferable to you? (Please tick only one)

0..... Print

1..... Electronic

2..... Face-to-face

3..... Audio

4..... Other (Please specify)
.....
.....
.....

Please could you briefly state why that format is preferable to you?
.....
.....
.....
.....

B. Secondly an information seeking situation/ critical instance in relation to personal issues

16. Please describe a major situation/instance where you had a need to find information related to your personal issues at UKZN.

.....
.....
.....
17. How or where or from whom did you go about finding information to resolve the situation/instance? (If applicable you may give more than one source of information.)

.....
.....
.....
18. Was the information obtained useful?

0..... Yes (if yes please go to Q 20)

1..... No

19. If the information obtained was not useful, why was that the case?

.....
.....
.....
.....
20. In relation to satisfying information needs concerning your personal issues which information format is the most preferable to you? (Please tick only one)

0..... Print

1..... Electronic

2..... Face-to face

3..... Audio

4..... Other (Please specify)

.....
.....
.....
Section 3- Information related to International Students Office (ISO)

21. Are you aware of the services that are provided by International Students Office (ISO)?

0..... Yes

1..... No

22. If yes, how did you get to know about those services?

.....
.....
.....

23. Among the services that are provided by the ISO, which ones are and have been of use to you?

Study visa-permit applications and extensions	very useful	useful	not useful
Applying for medical aid cover	very useful	useful	not useful
International clearance	very useful	useful	not useful
Faxes and registered mail services	very useful	useful	not useful

Other service/s? Please specify and indicate its/their usefulness

.....
.....

24. If you indicated any service/s which was/were not useful to you in question 23 above could you briefly explain why it/they was/were not useful?

.....
.....
.....

25. Are there any other services that you think that the ISO should be providing (but is not?) Please list the service/s below.

.....
.....
.....

26. Is there any way that services for international students can be improved at the UKZN-PMB? If so, please elaborate

.....
.....
.....

27. Any other comments? Please elaborate.

.....
.....
.....

Thank you very much for your time.

Appendix 3: Letter of consent for the Head of International Student Office

22 October 2011

I, Moïse Majyambere, am a student currently registered for a Masters of Information Studies Degree at the Pietermaritzburg campus of the University of KwaZulu-Natal (UKZN). The topic of my thesis is: **“The information needs and information seeking behaviour of international students at the University of KwaZulu-Natal, Pietermaritzburg Campus.”**

You are invited to participate in the research which will be conducted in my personal capacity. The purpose of this study is to identify the information needs and information seeking behaviour of international students. The research will also assist in identifying different information services offered by the International Student Office, and it will help in determining whether those services that are provided by the University meet the information needs of international students or not. The findings may be able to assist the university to improve information delivery systems and at the same time, contribute to ensuring the quick and easy integration of international students at UKZNP Campus.

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. Please note that your name will not be included in the report and your confidentiality will be maintained throughout the study.

Your participation in answering the questions is completely voluntary. You have the right to withdraw at any time during the study. I appreciate the time and effort it would take to participate in this study.

Thank you.

Yours sincerely,

Moïse Majyambere

Email: 208524104 @ukzn.ac.za

Please complete this form

I..... (full names of participant)
hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

Signature of Participant:

Date:

Email:

Appendix 4: Interview schedule for the Head of International Student Office

I am a student at the University of KwaZulu-Natal, Pietermaritzburg Campus studying towards a Master of Information Studies Degree. The purpose of my research is to identify the information needs and information seeking behaviour of international students on the Pietermaritzburg Campus of UKZN. The findings may be able to assist the university to improve information delivery systems and at the same time, contribute to ensuring the quick and easy integration of international students at UKZNP Campus.

I will be extremely grateful if you would allow me to interview you as part of my research. The interview should take no longer than 15 minutes.

1. How long have you been working for the International Students Office?

.....

2. How often do you assist international students?

Very often Often Sometimes Rarely Not at all

3. What services are provided by the International Students Office?

.....
.....
.....
.....

4. Are the international students aware of such services?

Yes No

4.1. If yes, how do you make international students aware about the available services?

.....
.....
.....

4.2. If no, what do you think are the reasons for (some) students not being aware of the services?

.....
.....
.....

5. Which services are mostly utilised?

.....
.....
.....
.....
.....

6. In your opinion why these services are utilised the most?

.....
.....
.....
.....

7. Which services are under-utilised?

.....
.....
.....
.....

8. In your opinion why are these services under-utilised?

.....
.....
.....
.....

9. What would you say are the problems experienced in the provision of services to international students?

.....
.....
.....
.....

10. Is there anything being done to address these problems? If so, please elaborate.

.....
.....
.....

11. Are there any new initiatives regarding information services for international students? If so, please elaborate

.....
.....
.....

12. Do you cooperate (either formally or informally) with any other student services on campus e.g. Student Counselling Centre, Student Representative Council (SRC), etc, with regard to the international students?

Yes No

12.1. If yes, please could you explain the nature of this cooperation?

.....
.....
.....

12.2. If no, please could you specify the reasons for the lack of this cooperation?

.....
.....
.....

13. Are there any other comments that you would like to make?

.....
.....
.....
.....
.....

Thank you very much for your time.