

**AN ANALYSIS OF THE ADJUSTMENT PROBLEMS OF
INTERNATIONAL STUDENTS IN A SOUTH AFRICAN
UNIVERSITY**

by

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DECLARATION

I Dennis Yao Dzansi, student number 2005097155, do hereby declare that this research report submitted to the University of the Free State for the Degree MAGISTER ARTIUM (HIGHER EDUCATION STUDIES) is my own independent work and has not previously been submitted by me at another university/faculty. I furthermore cede copyright of the dissertation in favour of the University of the Free State.

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I Dennis Yao Dzansi, remain ever grateful to the following:

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Dennis Yao Dzansi

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List of University Acronyms

University	Full name
UNISA	University of South Africa
UCT	University of Cape Town
NWU	North West University
UKZN	University of Kwazulu Natal
UP	University of Pretoria
TUT	Tshwane University of Technology
UW	University of the Witwatersrand
NMMU	Nelson Mandela Metropolitan University
CPUT	Cape Peninsula University of Technology
UFS	University of the Free State
US	University of Stellenbosch
RU	Rhodes University
UWC	University of the Western Cape
UJ	University of Johannesburg
VUT	Vaal University of Technology
FHU	Fort Hare University
CUT	Central University of Technology
UL	University of Limpopo

SUMMARY

The literature on *international student adjustment problem* is replete with studies done in universities in the West. This skews the understanding of the *international student adjustment* phenomenon in favour of developed countries at the expense of the less developed ones and thus creates an obvious gap in the student adjustment literature.

The purpose of this study was to fill this apparent gap by exploring the nature of adjustment problems encountered by international students at the Central University of Technology (CUT), a typical developing world university, located in Bloemfontein, in the Free State Province of South Africa.

The empirical study was preceded by an extensive literature survey that led to the conclusion that while international students' adjustment problems are numerous and similar in many respects, they differ significantly across countries, and according to a number of demographic factors. This means that in part, adjustment problems are contextual. The implication is that any wholesale use of existing measurement instruments that were specifically designed for Western country conditions would be inappropriate for use in the South African context. Consequently, a custom made measurement instrument was developed for this study. Validity and reliability issues that naturally emerge with custom made instruments were thoroughly dealt with.

Among others, the empirical investigation revealed that:

1. International students at CUT encounter many adjustment problems.
2. International students at CUT regard their adjustment experiences as problematic.
3. The adjustment problems of international students at CUT differ significantly according to country/region of origin, age, and gender of students.

The study identified the following as the ten most difficult adjustment problems international students at CUT have to contend with in their order of difficulty starting with the most difficult to the least difficult:

1. High cost of living in South Africa
2. Cost of food
3. Cost of health insurance
4. Getting visa extensions
5. Feel comfortable visiting immigration office
6. Work restrictions
7. Becoming a citizen of South Africa
8. Understanding immigration rules
9. Sufficiency of funds to meet expenses

The study raises issues which, if attended to, could help ameliorate adjustment problems international students encounter at CUT. The expectation is that, by reducing the number and severity of adjustment problems, international students would live in harmony with their educational and social environment at CUT. This in turn would make CUT very attractive to international students.

Key terms:

- International student adjustment problem
- Internationalisation of education
- International Education Association of South Africa
- Theoretical framework
- Conceptual framework
- Developed country
- Developing country
- Academic problems
- Non-academic problems

OPSOMMING

Die literatuur oor die *internasionale studente-aanpassingsprobleem* wemel van studies wat aan universiteite in die Weste gedoen is. Dit beteken dat enige begrip van die *internasionale studente-aanpassingsverskynsel* skeefgetrek is ten gunste van die ontwikkelde lande ten koste van die minder ontwikkelde state. Dit skep 'n ooglopende leemte in die literatuur oor studente-aanpassing.

Die doel van hierdie studie was om dié oënskynlike leemte te vul deur ondersoek in te stel na die aard van aanpassingsprobleme soos ervaar deur internasionale studente aan die Sentrale Universiteit vir Tegnologie (SUT), 'n tipiese 'derde wêreld'-universiteit geleë in Bloemfontein in die Vrystaat Provinsie in Suid-Afrika.

Die empiriese studie is voorafgegaan deur 'n omvattende literatuuroorsig, wat gelei het tot die gevolgtrekking dat hoewel internasionale studente talle aanpassingsprobleme ervaar wat in baie opsigte onderling soortgelyk is, daar tog in hierdie verband beduidende verskille oor lande heen en op grond van 'n aantal demografiese faktore voorkom. Dit beteken dat aanpassingsprobleme gedeeltelik kontekstueel van aard is. Die implikasie is dat enige algemene gebruik van bestaande metingsinstrumente wat spesifiek vir Westerse lande ontwerp is, nie toepaslik vir gebruik in die Suid-Afrikaanse konteks sou wees nie.

Gevolklik is 'n pasgemaakte meetinstrument vir hierdie studie ontwikkel. Kwessies wat verband hou met geldigheid en betroubaarheid, wat vanselfsprekend betrekking het op pasgemaakte instrumente, is op 'n deeglike wyse hanteer.

Die empiriese ondersoek het onder andere die volgende aangetoon:

4. Internasionale studente by die SUT ervaar baie aanpassingsprobleme.
5. Internasionale studente by die SUT beskou hulle aanpassingservarings as problematies.

6. Die aanpassingsprobleme van internasionale studente aan die SUT verskil beduidend, afhangende van die land/streek van herkoms, ouderdom en geslag van studente.

Die studie het die volgende tien aanpassingsprobleme geïdentifiseer as die moeilikste waarmee internasionale studente aan die SUT worstel. Hulle word hieronder van baie moeilik na minder moeilik gerangskik:

10. Hoë lewenskoste in Suid-Afrika
11. Hoë voedselpryse
12. Koste van gesondheidsversekering
13. Verlenging van visas
14. Besoeke aan immigrasiekantore
15. Werkbeperkings
16. Pogings om 'n burger van Suid-Afrika te word
17. Pogings om immigrasiereëls te verstaan
18. Fondse om uitgawes te dek

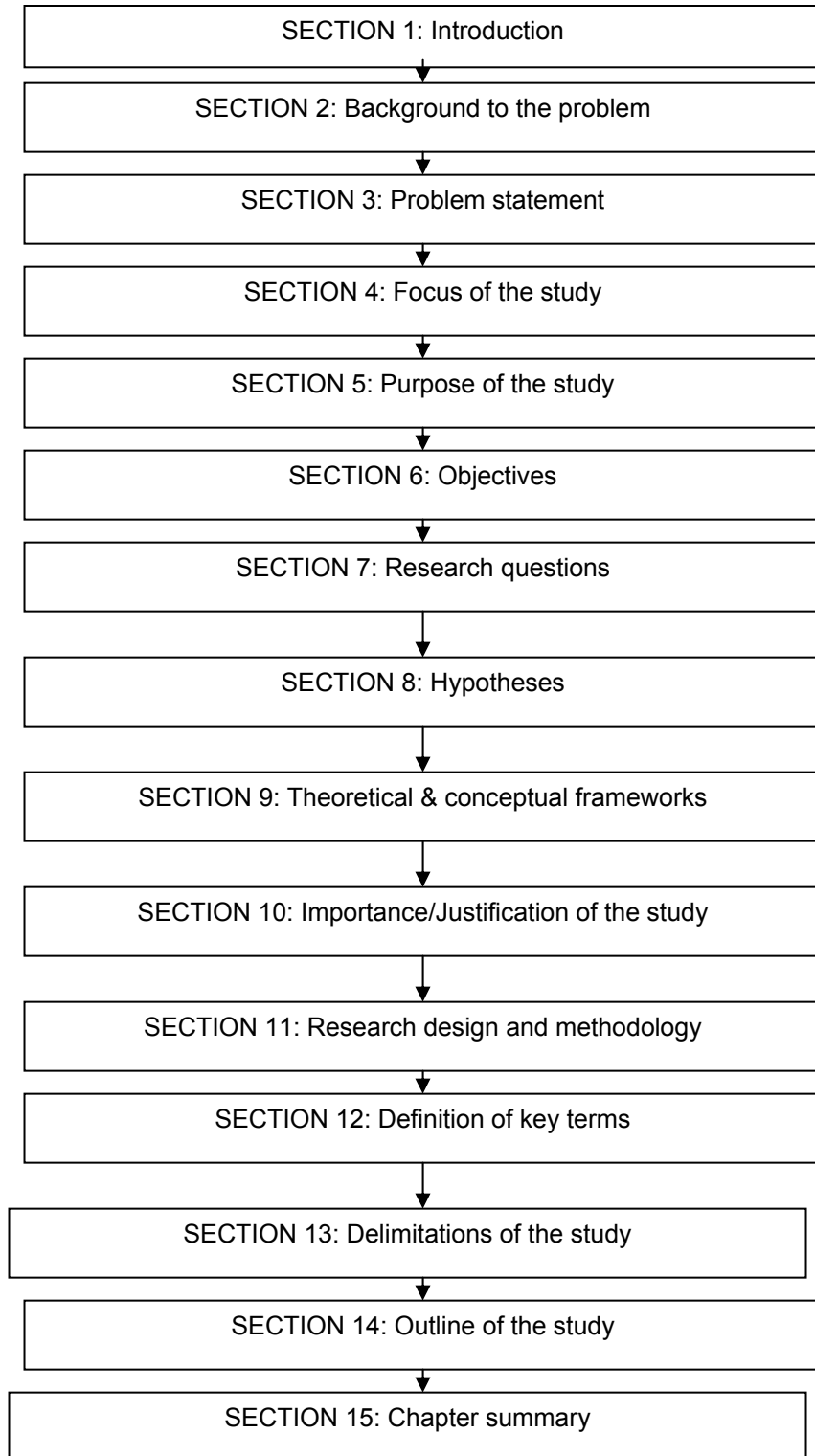
Hierdie studie plaas die soeklig op kwessies wat indien dit aandag sou kry, 'n bydrae sou kon lewer om die aanpassingsprobleme wat internasionale studente aan die SUT ervaar, effektief aan te spreek. Die verwagting is dat 'n afname in die aantal en graad van erns van aanpassingsprobleme dit vir internasionale studente moontlik sou maak om in harmonie met die opvoedkundige en sosiale omgewing by die SUT te leef. Op sy beurt sou dit die SUT baie aantreklik vir internasionale studente maak.

Sleuteltermes:

- Internasionale studente-aanpassingsprobleem
- Internasionalisering van onderwys
- Internasionale Onderwysvereniging van Suid-Afrika
- Teoretiese raamwerk
- Konseptuele raamwerk
- Ontwikkelde land

- Ontwikkelande land
- Akademiese probleme
- Nie-akademiese probleme

CHAPTER 1 OUTLINE



CHAPTER 1: INTRODUCTION

“Secure and happy students are more likely to be academically successful, to enjoy good memories of their time overseas, and so become satisfied customers”.

(Humphrey, 1999: 80)

1.1 CHAPTER INTRODUCTION

The main purpose of this chapter is to provide an overview of the entire research project. It begins with a presentation of the background to the problem followed by statement of the problem; the focus of the study; study purpose; importance of the study; as well as the research questions and hypotheses. The chapter also presents the theoretical framework underpinning the study; the research design and methodology applied to the collection and analysis of data; definition of key concepts; and the delimitations of the study. The chapter ends with an outline of the various chapters in the report.

1.2 BACKGROUND TO THE PROBLEM

Universities all over the world seem to be showing a growing interest in attracting more and more international students into their student community. This trend is apparent in South Africa and can be attributed to at least three main drivers.

First and foremost is the general realisation by the South African government, policy makers, national educational authorities, as well as the South African universities themselves, of the direct economic benefits of admitting international students. As Ward (2001: 6) points out, the economic gains of accepting international students far outweigh the costs associated with it. There is now a clear need for South African universities to devise innovative ways of generating

additional income in the light of the government's cutbacks on university funding. In general, international students pay higher fees than local students.

Added to the economic benefits are the perceived non-economic benefits to students, recipient countries, host institutions, and home countries. As pointed out by the International Education Association of South Africa (IEASA) (2006), study abroad allows students to add international dimensions to their skills, recipient countries and host institutions acquire research and cultural benefits, and home countries benefit when citizens return with knowledge and links with other countries. By implication, authorities are driven to internationalise South Africa's higher education system in search of research and cultural benefits.

A third and equally important driver of internalisation of South Africa's education seems to be globalisation. The influence of globalisation on internationalisation of education across the globe has been highlighted by a number of researchers. Butcher (2004) in this regard notes that globalisation has led to exponential growth in international students. The David Arnold Institute of International Education (DAIIE) (2001) explains the influence of globalisation on internationalisation of education by pointing out that students' options for higher education are no longer limited by national boundaries. As such students could easily seek educational opportunities outside their national boundaries.

Given the fact that South Africa is now a fully integral member of the global village, it is not farfetched to suggest that the same globalisation is driving the internationalisation of the educational system in South Africa. Thus Ramphela (no date) rightly noted "internationalisation of education particularly at the university level, has well permeated the South African education system". The formation of the International Education Association of South Africa (IEASA) in 1996 lends credence to this assertion.

While Internationalisation of education seems to exert positive economic and non-economic influences on universities it does not mean that there are or can not be negative ramifications because everything has its down side. In fact, DAIE (2001) warned of potential undesirable consequences of internationalisation of education by pointing out that whilst it could produce desirable spin-offs for universities, the same institutions could end up losers in the so called “global higher education game”. In spite of these negative perceptions, Ward (2001: 6) notes that there is no doubt that the gains by far outweigh the costs. The drivers, merits and demerits of internationalisation will fully be discussed in Chapter 2.

Many universities, especially those in the developed world have had long histories of admitting sizeable numbers of international students. Except for limited admissions from neighbouring countries especially Lesotho, South African Universities did not have a significant international student component in the past because of its apartheid policy that directly and indirectly excluded international students from enrolling in South African Higher Institutions. However, since the aftermath of democratization in 1994, the number of international students has steadily increased to significant proportions. This trend augurs well not only for its economic and educational imperatives but it is also important for improving the international stature of these universities.

Several researchers have studied the international student adjustment experiences in the developed countries. Yeung (1980); Lanz (1985); McCalment (1985); Barakat (1988); Wong (1991); Junius (1997); Nebedum-Ezeh (1997); Cheng (1999); Kono (1999); Amundson (1999); Zhang (2002); Duerto (2004); Wang (2004) have all studied the international student adjustment problems (ISAP) at various universities in the West. Sadly, except for a few in India and Shindondola's (2002) Master's dissertation which examined international students' experience of xenophobia at the Rand Afrikaans University in South Africa, the developing countries have not attracted much attention in this area of

study. Even in the case of the developed countries, most of the studies were carried out in only a few countries namely the USA, Canada, UK, New Zealand and Australia.

This is quite understandable since until recently, the trend has always been for people moving from developing countries to developed countries for their higher education. Although a developing country, India also attracted many international students probably because study fees are more competitive than those of the developed countries.

There are many theories and ample empirical evidence of the types and extent to which international students suffer adjustment problems when they travel abroad (to the developed countries) for study purposes.

Al-Sharidey and Goe (1998) for example, found that loneliness, unfamiliarity with American customs, norms, and values and loss of social status are the major problems international students frequently encounter in adjusting to their new American social environment, meeting their personal life needs, and performing satisfactorily in the American Universities.

Cheng, Ding and Perez (1998) identified cultural shock, language shock, change in social status, academic performance, isolation, alienation, discrimination and family-related pressure as the main “stressors” for international students studying in America. According to the same authors, stressor levels differ among Asian students according to their countries of origin. This indicates that when studying adjustment of international students, it will be more appropriate to separate them into their different countries of origin.

The North Western University (2001) in the USA theorised that all people who move from one culture to another will undergo a four-stage cultural adjustment which eventually will lead to adaptation and biculturalism. It however points out

that, international students will never reach the stage of cultural adaptation. This would suggest that any effort in trying to help international students adjust to their new cultural environments is simply an exercise in futility.

All of these theories are based on findings conducted in the Western world and may therefore not be applicable to a developing country like South Africa where conditions are not necessarily the same as in the West.

The researcher is well aware of the adjustment challenges many international students encounter in South Africa. As an international student at three South African Universities, the researcher experienced many adjustment problems. Even today, as a faculty member at a South African University - the Central University of Technology (CUT), one continues experiencing adjustment problems. These personal experiences were supported by informal discussions with a number of international students who indicated that they have been experiencing or experienced a number of challenges in adjusting to life at CUT.

Currently, as noted in the preceding paragraphs a major gap exists in the research literature as it affects international students' experiences in third world countries. The literature search indicates that although much work has been done on foreign student adjustment experiences in the developed world, that is, Europe, the USA and Australia, only minimal research on international students' adjustment problems in the developing countries exists.

Meanwhile, the available literature suggests that foreign students studying in the developed countries encounter a number of adjustment challenges. For example, Al-Sharidey and Goe (1998) found that loneliness, unfamiliarity with American customs, norms, and values, and loss of social status are the major problems international students frequently encounter in adjusting to their new American social environment, meeting their personal life needs, and performing satisfactorily in the American Universities. In their study, Al-Sharidey and Goe

(1998) collected primary data through telephone conversation from a stratified random sample of foreign students. Regression analysis was performed on the data in order to test their research hypotheses. The main finding here was that in general international students tended to have low levels of self-esteem.

As mentioned earlier, Cheng *et al.*, (1998) identified cultural shock, language shock, and change in social status, academic performance, isolation, alienation, discrimination and family-related pressure as the main “stressors” for international students studying in America. The study also found difference in stressor levels among Asian students according to their countries of origin. This indicates that when studying adjustment of international students, it will be more appropriate to separate them into their different countries of origin. The study also indicated that international students reported greater satisfaction with the support they got from the host institution than their American counterparts. The investigation further revealed that international students engaged in more educationally enriching activities than their American counterparts. This may be due to the good support they received.

Since these findings relate to developed countries, it will be interesting to find out what happens to foreign students who study in developing countries. This will help in a better understanding of the international students’ adjustment phenomenon in particular and the students’ adjustment in general.

1.2.1 CUT international student numbers at a glance

Compared to pre-1994, the Central University of Technology (CUT) now admits a significant number of international students. However, data supplied by the Student Affairs Office indicates a declining international student population in recent years. According to official statistics released by Student Affairs Office, (See Chapter 2 for details) the number of international students on the books of CUT in 2003 was 1002; in 2004, the figure fell to 918; in 2005 it further fell to 768

and by June 2006 there were only 460 international students at CUT. It is quite clear that the international student enrolment at CUT is decreasing at an alarming rate. Between 2003 and 2004, international student numbers dropped by about 8%; the decrease between 2004 and 2005 was 16%; and between 2005 and 2006, the numbers dropped by a massive 36%. This trend is quite significant and it needs investigation.

Recently the management committee (MANCOM) of CUT released a statement admitting lack of recruitment drive as the reason for the comparatively small number of Botswana students. It stated that compared to the over 300 Botswana students in a similar institution, CUT only had about 30.

Plausible as this reason may be, the researcher contends that there might be other reasons that could possibly account for this trend. So far, as indicated earlier, research indicates that international students experience a host of adjustment problems. The impact of adjustment problems on student numbers is well documented. For example, Maundeni (1999: 28) argues that adjustment can be positive or negative in a student (positive adjustment occurs when the student experiences harmony with the environment. Similarly, negative adjustment occurs if student experience is not harmonious). Based on this analysis, it is reasonable to postulate that negative adjustment problems encountered by international students are responsible for their declining numbers at CUT. An analysis of adjustment experiences of international students at CUT could therefore assist in explaining this dwindling numbers.

1.2.2 The context within which international students study at CUT

CUT is a university under 'transformation'. It is undergoing transformation from the so-called previous 'Technikon' to what is now known as a 'University of Technology'. This transformation was engineered by the then Minister of Education Professor Kader Asmal, to bring parity to South Africa's 'fragmented'

tertiary education system. As such, CUT has undergone drastic changes and continues to change. Important and easily visible changes have taken place in the social, cultural, and academic front of CUT.

The social structure of the institution has changed with multiplicity of social groupings that were not apparent in the past. For example, there is the 'poor' versus the more 'affluent' on the one side and the 'black' versus 'white' on the other side. Undesirable as some of these groupings/classifications may be, their emergence is the result of legislation that has made it possible for all, irrespective of social standing to attend university including CUT. Thus today, one finds a number of previously underprivileged students now enrolled at CUT. CUT is now a predominantly black institution with fewer whites than before pre 1994.

Apart from changing the social structure, the changes in the South African higher education system has also created a multicultural environment at CUT. For example, legislation has compelled CUT to adopt a nationally acceptable language policy to take care of the different cultural groupings. Thus, although CUT is an English medium institution, Afrikaans, Sesotho, and Setswana remain important languages of communication. Another product of the transformation is the changing curriculum to show a 'true' university 'character'. It is within these contexts that the international students study and have to adjust to.

1.2.3. Surveying international student adjustment problems

The international student adjustment problem phenomenon has been surveyed in three main ways. These are *national surveys*, *multi-institutional surveys*, and *single institutional surveys*. *National surveys* focus on all or many institutions in a country. *Multi institutional surveys* focus on a few institutions and attempt to make comparison. As the name suggest, *single institutional surveys* focus on a single institution. This study is limited to a single institution and that is CUT.

1.3 ASSUMPTIONS

The following assumptions underpin the study:

- International student adjustment problems can be grouped under nine categories namely: socio/cultural, academic, emotional/personal, financial, housing/residence, food, health, immigration, and international student advisory services.
- The survey questionnaire was comprehensive enough to investigate the nature and distribution (nine categories) of problems encountered by international students at CUT.
- The international students at CUT responded honestly to each statement.
- The experiences of international students will differ along certain demographic characteristics such as age, nationality, gender etc. Thus, analysis of data collected should be based on these personal backgrounds. This belief is borne out of Earwalker (1992) in UOFS (2005: 69) who after much investigation into student development and learning literature opines that “we can no longer assume that today’s students will have a great deal in common”.
- The problems encountered by the international students at CUT make their stay uncomfortable.
- The discomfort caused by problems encountered by international students at CUT is directly responsible for the dwindling number of international students at CUT.

- Identifying adjustment problems and taking corrective measures will improve international student intake at CUT.

These assumptions shaped the structuring of the research questions and the hypotheses formulation.

1.4 PROBLEM STATEMENT

In light of the importance of international student component to universities, the dearth of research into international student adjustment problem as it relates to South Africa must be worrying to university administrators in South Africa including CUT. This is because they will battle to attract and retain more international students. The problem is that should student administrators including those at CUT face such problems, they would have no prior knowledge or guideline to follow in addressing the problems. This will make their work very difficult if not impossible.

Yet, it has been argued above that the presence of international students enhances a university's image and also helps universities generate additional income. And in the light of government cut back on finance to universities, it seems logical that universities admit more international students. It is therefore not surprising that like all other South African universities, CUT has also opened its doors wider than ever before to international students. However, all these efforts may be in vain if international students' experiences are not pleasant for them.

Acceptance of Maundeni's (1999) assertion means that universities will have to create conditions that will make the international student live in harmony with the environment. This in turn means gaining a deeper understanding of the problems which international students face and then devising means to at least minimize them. As mentioned above, this need arises because difficulties encountered

have the potential of influencing an international student's decision not to return. For example, the possibility exists that dissatisfied international students could spread their experiences by word of mouth hence discouraging other potential international students from enrolling.

Finally, based on empirical evidence elsewhere, the conclusion was made in Section 1.3 above that, international students at CUT encounter adjustment problems. The question is therefore not about whether or not international students encounter adjustment problems at CUT but rather, it is about their nature. The problem to be investigated in this study is therefore the identification of specific factors that have the potential of making the adjustment of international students at CUT a negative one. It is hoped that identification of these factors could help authorities devise strategies to minimize adjustment difficulties if not entirely remove them.

1.5 FOCUS OF THE STUDY

This study falls within the field of Higher Education Studies with a focus on the adjustment experiences of international students who are currently studying at CUT, Bloemfontein Campus. As stated in Section 2 of this chapter, the researcher is well aware of the adjustment challenges many international students encounter because of personal experiences he had as an international student at three different South African Universities.

These personal experiences were largely corroborated by informal discussions with a number of international students and faculty who indicated that they face similar problems and a significant number of challenges in adjusting to life at CUT. Some of the students indicated that as a result of their experiences, they were unsure of returning to CUT the following academic year. The study therefore attempted to formally determine the nature of international student adjustment problems at CUT.

Differences in the kinds of problems encountered by international students became apparent during informal discussions. For example, while the Chinese students had great difficulty with communication, the other international students did not indicate it as a major concern. Some students from the SADEC region complained about delays in obtaining their student visas and in evaluating their certificates for admission purposes but students from other geographical regions did not have many problems in this regard. This suggests that adjustment problems could be as a result of certain background (demographic) factors.

Generally, this study explored problems that international students at CUT face, and have to deal with as they try to adjust to the social and academic life on campus and social life off campus. More specifically, the study examined whether or not some of these problems are peculiar to identifiable international student groups.

1.6 AIM OF THE STUDY

The overall aim of this case study is to help increase international student numbers at CUT by identifying and analysing the main adjustment problems that international students at CUT have to deal with. The identification and analysis of the major adjustment problems for international students should elucidate their nature. This insight should assist in the development of appropriate support system for this numerically small yet very important clientele of the university.

1.7 RESEARCH QUESTIONS

Based on the problem statement above the following research questions arise:

1. What are the most difficult adjustment problems for international students studying at CUT?

2. What is the international students' overall assessment of their adjustment experience?
3. Are there any significant differences in adjustment problems based on country/region of origin?
4. Are there any significant differences in adjustment problems based on gender?
5. Are there any significant differences in adjustment problems based on age?

1.8 HYPOTHESES

Research question 1 did not require a hypothesis for it to be answered. Responses to specific questions in the questionnaire were analysed in order to answer research question 1. However, in order to answer research questions 2, 3, 4, and 5, the following hypotheses were tested:

(H_{1o}): International students at CUT do not perceive their adjustment experiences as problematic.

(H_{1a}): International students at CUT perceive their adjustment experiences as problematic.

(H_{2o}): Perceived adjustment problems facing international students at CUT do not differ significantly based on Nationality/geographic region of origin.

(H_{2a}): Perceived adjustment problems facing international students at CUT differ significantly based on Nationality/geographic region of origin.

(H_{3o}): Perceived adjustment problems facing international students at CUT do not differ significantly based on gender.

(H_{3a}): Perceived adjustment problems facing international students at CUT differ significantly based on gender.

(H_{4o}): Perceived adjustment problems facing international students at CUT do not differ significantly based on age.

(H_{4a}): Perceived adjustment problems facing international students at CUT differ significantly based on age.

1.9 THEORETICAL AND CONCEPTUAL FRAMEWORKS

The theoretical framework underpinning this study is the person-environment relationship in student learning and development process as well as the theoretical perspective of hermeneutics (see Chapter 2).

The conceptual framework is student adjustment as applied to international students (refer to Chapter 2 for a detailed discussion of the conceptual and theoretical frameworks).

1.10 SIGNIFICANCE OF THE RESEARCH

Although much work has been done on international student adjustment problem in the West, particularly, the USA, UK, New Zealand and Australia, little if anything at all, is known about this phenomenon as it relates to developing countries in general and South Africa in particular. This creates a obvious gap in the literature that needs to be filled. It is therefore necessary to conduct a study of this nature. The study will contribute to a better understanding of university student adjustment phenomenon by the addition of international student adjustment problems in a developing country context.

It is undeniable that attracting and retaining international students has now become a major objective of most universities including CUT due to the perceived economic and non economic benefits they supposedly bring to the recipient country and host institution. Cigularova (2005:17) for example, made the important point that international students do not only bring intellectual and

cultural benefits but they also bring economic benefits to the US. He quoted the Institute of international Education (IIE) (2003) in support of this argument stating that international students in the US spent 12 billion dollars on tuition alone in 2003. Certainly, South African Universities will miss out on this opportunity if they do not make the adjustment of international students less problematic. Illumination of adjustment problems encountered by international students at CUT should eventually assist in attracting more and more of them to study at CUT.

This study would help promote diversity among CUT student population by contributing to the recruitment and retention of more and more international student component of other cultural backgrounds. It has been noted by researchers that international students do not only generate economic benefits. According to Zhao, Kuh, and Carini (2005:10); Cigularova (2005), international students also bring much needed intellectual and cultural benefits through cultural diversity. This is based on the understanding that cultural diversity would lead to inter-cultural learning and understanding which would lead to eventual tolerance of other cultures. Tolerance that would be welcome in South Africa in the face of the reported high level of xenophobia at the Rand Africans University (now university of Johannesburg) as reported by Shindondola (2002).

While cultural tolerance could itself be an end, it could also be regarded as a means to another end. According to Seo and Koro-Ljungberg (2005), the large numbers of international students has prompted researchers to study the cultural diversity embedded in the American universities. The authors further argue that this has not only created a favourable atmosphere at campuses to promote understanding and acceptance, but it has also attracted more international students to consider American universities as a source of higher education. A kind of cyclic process in which success leads to continued success. The importance of the current study is that it could lead to a similar situation at South African universities. Therefore, for CUT to succeed in increasing its international

student population, it needs to understand their problems. In other words, for CUT to become and remain competitive in the global market for international students, this study is necessary.

Higher education is virtually becoming a business in the true sense of the word. In business, customer satisfaction is regarded as a key marketing concept. The results of the study would prove useful for CUT student affairs officers in their marketing efforts. As Sargeant (2005:25) alluded, analysis of student groups that universities serve as customers is important because it precisely defines the requirements of those customers. Knowledge of international student social needs would help student affairs officers at CUT in the provision of world class quality service to this important clientele.

Other South African universities can also learn from the findings of the study. Immigration officials will also find the findings useful in policy formulation towards international students. The findings might highlight cumbersome immigration policies from the international student perspective.

From the aforesaid, it is quite clear that the importance of this study can never be overestimated. The next section describes the methods and procedures adopted in the empirical study.

1.11 RESEARCH DESIGN AND METHODOLOGY

This was a mixed-method (qualitative and quantitative) exploratory and descriptive case study (see Chapter 3 for explanation) involving a single South African University i.e. the Central University of Technology (CUT).

1.11.1 Sampling

Disproportionate random sampling was used to select 120 international students who were then served with a questionnaire. Initially, in depth face to face interviews were used to refine issues to be included in the questionnaire. The questionnaire was then pre-tested on a sample of 12 international students (see Chapter 4 for detailed discussion of sampling).

1.11.2 Questionnaire design

The instrument for gathering responses from international students was a structured four point itemised rating scale questionnaire. The itemised rating scale questionnaire is noted for its simplicity and suitability for making quantitative inferences. It was custom made but relying on input from those used by past researchers. Because reliability and validity are always major issues when 'untested' custom made questionnaires are used in research, a substantial part of the chapter on methodology is devoted to how validity and reliability issues were addressed. Another contentious issue that is, ethical conduct of the research is also addressed in Chapter 4.

1.11.3 Data analysis

As indicated earlier, face to face interviews was also used and was only meant to refine the major adaptation issues identified in the literature review that were considered relevant to CUT in order to identify potential questions to be included in the questionnaire. In other words, this exercise was intended as a data reduction method since there are a plethora of adaptation problems for international students that could not all be accommodated in a study of this nature.

1.12 DEFINITION OF KEY TERMS

The importance of definition of key terms in research can never be overestimated. Anderson and Arsenault (2002:58) for example point out that researchers do no justice to their studies when they fail to define their terms. They explain that because of the complex nature of educational concepts, and the imprecision of language usage, results that might appear clear to the researcher could mean different things to the reader. According to Bless and Higson-Smith (2005: 31), the three main functions of concepts as used in research are to facilitate communication, aid in classification of elements, and serve as building blocks of theory. They argue that for concepts to be useful, they must be defined in clear, precise and un-ambiguous and agreed-upon way. In order to avoid ambiguities for the reader, the following key terms (concepts) as used in this study unless otherwise stated mean the following:

International students

This term refers to a student at CUT who is not a South African Citizen (by birth or naturalisation) and who is not a permanent resident at the time of the research. In this sense, refugee students are considered international students. The term international student is used through out the study in place of the more popular term 'foreign student' because the researcher believes the term 'foreign' or 'foreigner' might appear offensive. Thus foreign or foreigner is only used where it is totally unavoidable. However, they refer to the same group of people.

Internationalisation of education

The term as used in this study refers to policies and practices related to the recruitment and retention of international students.

International student advisory service

This refers to a university unit that provides various types of assistance to international students.

1.13 DELIMITATIONS OF THE STUDY

The following delimitations served to focus the study:

1. The study was delimited to the Central University of Technology (CUT), Bloemfontein campus and did not include international students of the other campuses. It also did not include any other South African Universities.
2. The subjects of this study were delimited to international students who were enrolled at CUT, Bloemfontein campus in 2006 and did not include South African students.
3. The time of the empirical study was delimited to the period between June to October 2006.

1.14 OUTLINE OF THE STUDY

Chapter 1 provides a general introduction to the study. This includes a synopsis of the background to the problem. The problem to be investigated is then stated followed by identification of the focus of the study. The general aim, purpose of the study, study objectives, research questions and hypotheses are all stated. These are followed by presentation of the conceptual and theoretical frameworks guiding the study. A brief discussion of the research methodology applied to the study follows, key terms are then defined, limitations and delimitations of the

study are stated. The chapter ends with presentation of the organisation of the entire study and chapter summary.

Chapter 2 explores the literature on internationalisation of education. Specific issues discussed relate to the following topical areas: theoretical and conceptual framework underpinning the study; exploration of the concept of internationalisation of education and associated issues; examination of definition of the term international student; examination of student demographics of CUT and discussion of implications thereof; identification of the drivers of the upsurge in internationalisation of national education systems globally and South Africa in particular; a discussion of benefits, negative consequences, as well as pitfalls associated with internationalisation of education. The chapter ends with a summary of the main issues raised, discussed, or addressed in the chapter.

Chapter 3 continues the literature review by focussing on international student adjustment phenomenon. The principal purpose of this chapter is to assess what recent empirical studies of international students can tell us about the common international student adjustment problems, the causes of adjustment problems, and the methods used in previous studies including research design, data collection and data analysis methods.

Chapter 4 presents the methodology applied to the study. The main issues include statement of the research questions, aims, objectives and the hypotheses guiding the empirical investigation. The chapter also provides a description of the population under investigation, the sampling method and the sample size. Data collection, questionnaire design, validity and reliability issues, as well as data analysis are also discussed. Because ethics in research has become a topical issue, a substantial portion of the chapter is devoted to ethical issues associated with the study.

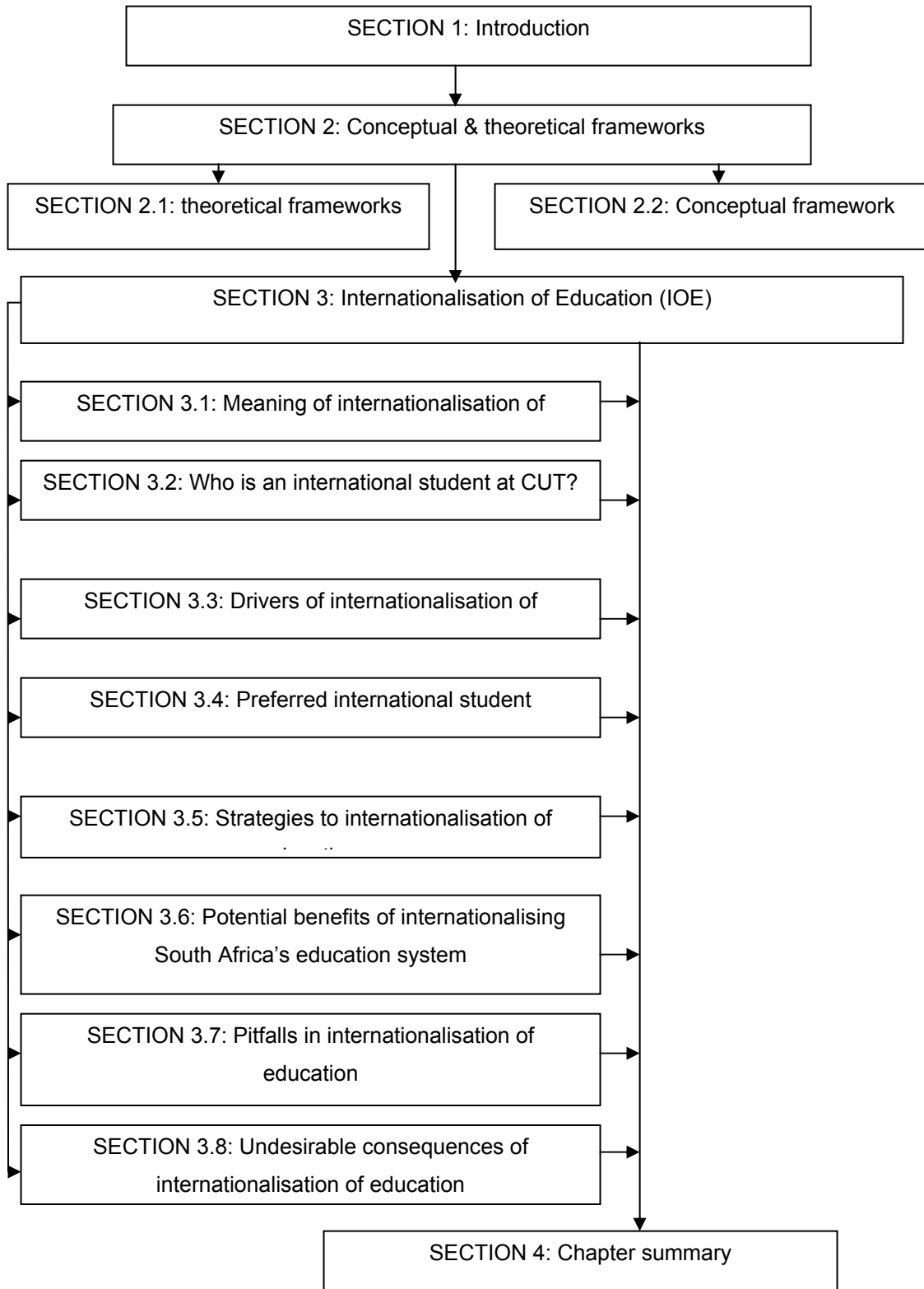
Chapter 5 presents and discusses the main findings of the empirical investigation.

Chapter 6 is devoted to presentation of conclusions and recommendations for university administrators, policy makers and future research.

1.15 CHAPTER SUMMARY

This chapter has provided a detailed introduction to the study. The next chapter begins the literature review by examining the concept of internationalisation of higher education.

CHAPTER 2 OUTLINE



CHAPTER 2: INTERNATIONALISATION OF EDUCATION

International students typically have a great many choices where to spend their educational dollars and they will shop around for the best deal

(Amundson, 1999: 33)

INTRODUCTION

The conceptual framework for this study is student adjustment and its application to international students. Because adjustment problems occur in the broader context of internationalisation of education, internationalisation of education is first explored in this chapter. But before any discussion of internationalisation of education, it is important to be explicit about the theoretical and conceptual frameworks. Anderson and Arsenault (2002: 57) remind us that:

Much of good research follows a framework this framework serves to clarify the problem and help determine the approach to its solution.....A framework is a model that allows the researcher to explore the relationship among variables in a logical and prescribed fashion. It clarifies questions by relating questions and constituent sub-questions and it summarises the overall concept being investigated.

The above statement underscores the need for researchers to state and explain their research framework so that the reader can understand the logic and relationships between concepts and variables in their work. The frameworks used in this study are therefore explained.

2.2 THE THEORETICAL FRAMEWORK

The theoretical framework for this study is the person-environment relationship or fit in the student learning and development process. Additionally, the hermeneutics perspective of gaining understanding issues guides the research process. These two theoretical perspectives are therefore explained.

2.2.1 The hermeneutical understanding

Hermeneutical circle and the cyclic process of understanding (Gadamer, 1976; Schwandt, 1998; Crotty, 1998; Alvesson & Sköldberg, 2000; Seo & Koro-Ljungberg, 2005) provided a substantial theoretical base for this study. Figure 2.1 illustrates the application of the hermeneutical cycle to the process of expanding the understanding of international student adjustment phenomenon in the South African university environment.

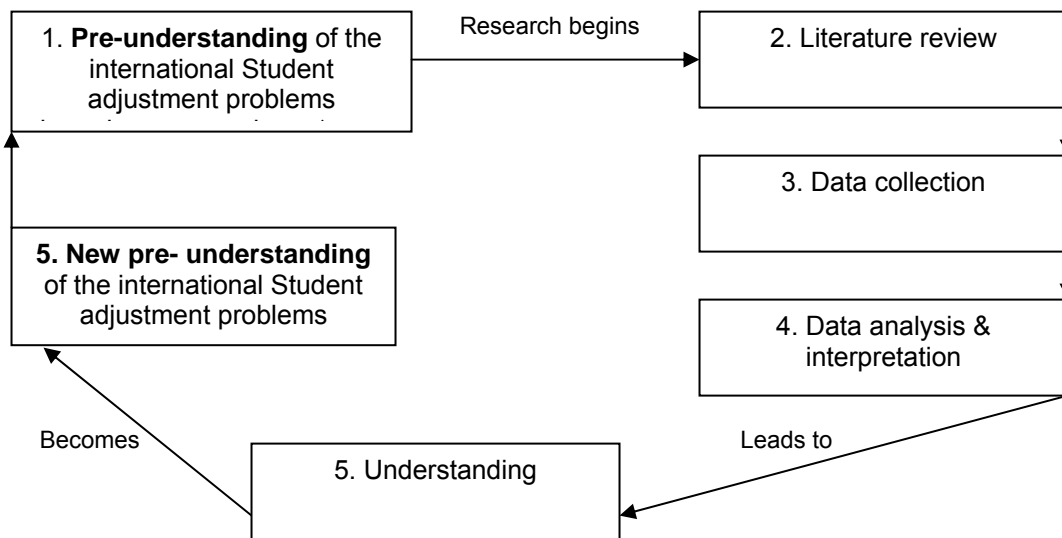


Figure 2.1 Hermeneutical cycle of understanding
Source: Seo and Koro-Ljungberg (2005) with adaptations.

The process (study) begins with existing understanding of international student adjustment based on personal experiences as a previous international student in three South African Universities (see Figure 2.1). This understanding was expanded through the literature review of the international student adjustment phenomenon at universities across the world and the interviews with international students at CUT through analysis and interpretation. These processes of reading and analysis enhanced new preunderstanding, which will guide the direction of future research (see recommendations for future research).

2.2.2 The person-environment theory of student development and learning

There are several reasons for going to college but there is no doubt that the overriding objective is to gain knowledge. It is also a truism that like all learners, international students want to be successful in their studies. In fact, it is hard to imagine any student who does not want to succeed in the learning endeavour.

While there are many theories all aimed at explaining how students learn, how they can be made to learn better, and the factors that impact on student learning, Chickering and Reisser (1993) provide us with four useful and current theoretical contexts within which student learning and development and their eventual success takes place. According to Chickering and Reisser (1993), student learning and development theories can be classified broadly as: *cognitive-structural theories*, *typology theories*, *psychological theories*, and *person-environment theories*.

In Chickering and Reisser's (1993) view, *psychological theories* try to explain student development in terms of tasks or stages (corresponding to chronological age) that students undergo in terms of thinking, feeling, behaving, valuing and relating to others; the *cognitive-structural theories* are concerned with the changes that take place in the way students perceive, organise, and reason; *typology theories* describe differences in learning styles, personality types, and

temperament as context of development and learning; and the *person-environment theories* address interaction between the college student and the college environment. When applied to the international student, it is basically, this theory is about the fit between the international student and the foreign college environment (see Section 2.2.2 for a detailed discussion).

Of the above theories and as indicated in Section 2.2 above, the *person-environment theory* guides the current study. The choice of the *person-environment theory* as a theoretical framework is based on the assumption that it provides the most appropriate theoretical basis for studying international students' adjustment.

This is because according to Wikipedia (2006), the total environment of the student is educational and must be used to help student achieve full development. Checkering and Reisser (1993) also believe that the *person-environment* interaction theories are based on the premise that individual students can experience the same environment differently. There are varieties of person environment theories. For example, the *person-vocation*, *person-job*, *person-group*, and *person-organisation* theories (Jansen & Kristof-Brown, 1998) all try to explain how the setting, be it organisational environment or group environment interacts with the person. These differences notwithstanding, the fundamental commonality is that the *person-environment* theories all seem to examine the person and the environment and how the two interact with one another.

So, of what relevance is the person-environment theory to the current study on international student adjustment? Maundeni (1999) opines that a student can encounter any one of two types of adjustment in college. According to Maundeni (1999: 28), positive adjustment occurs when the student experiences harmony with the environment and negative adjustment occurs if student experience is not harmonious.

Acceptance of this assertion means that universities (including CUT) must create conditions that would make international students live in harmony with their environment. This in turn means a clear understanding of problems that international students face. This need arises because the possibility exists that difficulties encountered in adjusting to a new educational environment have the potential of influencing international students' decision not to return. A further possibility exists that dissatisfied international students could spread their experiences by word of mouth hence discouraging potential international students from enrolling.

The *person-group* and *person-organisation* theories also have relevance for this study because these theories are often used by educational authorities to conceptualise student behaviour as a social function of the university student and the university environment. South African universities (including CUT) can therefore use the findings of this study to conceptualise their international student behaviour. Based on this viewpoint the findings can assist university authorities (i when they design new courses, facilities, learning environments, and programmes for their students including the international students so as to make adaptation more bearable.

2.3 THE CONCEPTUAL FRAMEWORK

When someone says a word, be it real or abstract, it evokes a *mental image*. Babbie and Mouton (2005:109) refer to these *mental images* as *conceptualisation* (or *conceptions*) while Wikipedia (2006) refers to a concept as *an abstract idea* or *mental symbol*. The conceptual framework for this study is student adjustment problems as applied to international students. The *mental image* here can be stated as: *the difficulties and challenges that international students have to deal with and overcome as they go about adapting to their new educational and social environments*. As such, the literature review focused on

the concepts of *internationalisation of education* and *student adjustment problems*.

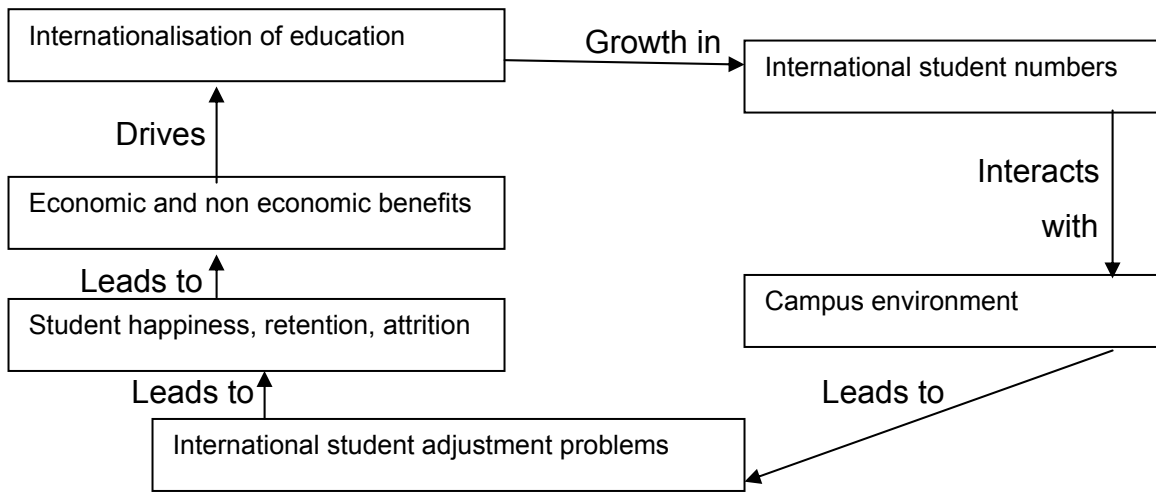


Figure 2.2 Conceptualisation of the international student adjustment process (own compilation).

A simple pictorial representation of the conceptual framework for this study can be illustrated as in Figure 2.2.

2.4 INTERNATIONALISATION OF EDUCATION

Altbach (1999); Teichler (1999); Anderson and Maharasoa (2002); and IEASA (2006), all agree that internationalisation of higher education is nothing new. In fact, Junius (1997: 8) had earlier traced the practice of internationalisation of education to as far back as 600 B.C. In the process, he identified the Universities of Taxila and Nalanda both in India as the first to have admitted international students. Similarly, IEASA (2006: 23) observes that the practice has been there for centuries when people travelled from their home countries to established institutions of mainly their colonial powers.

In spite of its early history, the concept of *internationalisation of education* seems relatively new in South Africa. This could be accounted for by the apartheid

policies of the past that isolated South Africa from the rest of the world. Nonetheless and as rightly observed by Lutabingwa (2005: 1108), Internationalisation of education is now a high priority in South Africa just as it is in the rest of the world.

2.4.1 What does 'internationalisation of education' mean?

Although it is not the researcher's intention to enter into a detailed discussion of the plethora of definitions of the concept of internationalisation of education, it is still important to operationally define the term in order to provide some guidance for the empirical part of the study.

This exercise is considered necessary because, as noted by Kono (1999: 10), Anderson and Maharasoa (2002: 15) and Lutabingwa (2005: 1109), the concept of *internationalisation of education* can be and has been used in many contexts and for diverse purposes and therefore does not have a universal definition. In other words, the concept *internationalisation of education* is multi faceted.

Anderson and Maharasoa (2002: 15) identified no less than five themes in the existing definitions for internationalisation as used in higher education. These include: *importation of higher education, exportation of higher education, transfer of academic offerings, distant higher education, and formation of higher education networks*. Lutabingwa (2005: 1110) sees internationalisation of education as the flow of students to and from other countries. In this sense, internationalisation of education in the South African context may mean the flow of South African students to other countries or international student inflows into South African Universities. Lutabingwa (2005) identified foreign language teaching; teaching about other countries and cultures; faculty exchanges between countries; international development assistance; comparative education; multicultural education; international linkages and partnerships; and global

education as other facets of international education. All of these confirm the multifaceted nature of the concept.

The above clearly show that the potential for ambiguity is real. A working definition of *internationalisation of education*, for the purpose of this study is therefore imperative. Because this study was conducted in the context of international mobility of students and is about the inflow of international students into South Africa, *Internationalisation of education* is operationally defined as ***policies and practices related to the recruitment and retention of international students***. This definition means anything done to facilitate the flow of international students into South African Universities.

2.4.3 Who is an international student at CUT?

Having clarified what is meant by *internationalisation of education*, it is also important to describe who the typical international student is at CUT. In order to do this, it is necessary to examine how other researchers went about classifying people as international students in the past.

To Yeung (1980: 9), an international student is “any student who was not a citizen of America or an immigrant, who was enrolled at an American institution on student or exchange visa”.

Lanz (1985: 6) operationally defines international graduate student as “a student who had been studying at the University of Pittsburgh, who was not an American citizen, immigrant, or permanent resident”.

Junius (1997: 5), defined the international student as “a student attending North Arizona University, who is not a citizen of the US, and who holds a non immigrant visa”.

Nebedum-Ezeh (1997: 10) regards any one who was enrolled at institutions of higher learning in the US and who was not a citizen, an immigrant (permanent resident), or refugee as international student. In this sense, refugees are not international students.

According to Cheng (1999: 5), the international student is a student attending university who is not a citizen, an immigrant (permanent resident), or refugee, and who hold non-immigrant visa. It is worth noting that like Nebedum-Ezeh (1997: 10), Cheng (1999: 5) also does not consider refugees as international students.

The common thread appearing in the above definitions is reference to citizenship, permanent residence status, and immigration status. For the purpose of this study, the international student at CUT is **“a student who is not a South African Citizen (by birth or naturalisation) and who is not a permanent resident at the time of the research”**. This means that unlike Cheng (1999: 5) and Nebedum-Ezeh (1997: 10), refugee students are also considered international students for the purpose of this study. Refugees are included because like other classes of international students, their status is temporary.

2.4.4 CUT student profile

As indicated in Chapter 1, Table 2.1 shows a declining trend in international student enrolment at CUT. It is therefore easy for one to conclude that CUT does not appear attractive to international students in recent years. This must be worrying to student recruitment officers specially those at the international office. In the face of increased efforts to attract and retain international students, this trend needs investigation.

But the question remains, in the face of declining places for local students, why should authorities worry so much about international students?

Table 2.1: CUT student enrolment according to country/region of origin.

COUNTRY/ REGION	2001		2002		2003		2004		2005		2006*	
	NO	%	NO	%	NO	%	NO	%	NO	%	NO	%
ASIA	3	0	7	0.1	8	0.1	21	0.2	25	0.25	20	0.2
EUROPE	12	0.2	12	0.15	21	0.2	15	0.1	5	0.05	1	0
SADC (EXCLUDING RSA)	694	9.3	958	11.5	1244	12.9	842	7.4	672	6.5	425	4.3
SOUTH AMERICA	-	-	-	-	1	0	1	0	0	0	0	0
OTHER (AFRICA)	9	0.1	12	0.15	14	0.2	20	0.2	17	0.2	14	0.1
TOTAL INTERNATIONAL	718	9.6	989	11.9	1288	13.4	898	7.9	719	7.0	460	4.6
SOUTH AFRICA	6758	90.4	7353	88.1	8338	86.6	10449	92.1	9600	93.0	9553	95.4
GRAND TOTAL	7476	100	8342	100	9626	100	11347	100	10319	100	10013	100

Source: Adapted from CUT, Stats-at-a-glance (2001-2006).

* First semester enrolment. These figures are likely to change significantly by the time the empirical study takes place due to second semester enrolments.

2.4.5 South African Universities student profile for 2005

In order to appreciate the situation at CUT it is imperative to explore how other South African universities especially those in the same category as CUT are faring in international student enrolment. Table 2.2 below shows the national picture of international student enrolment at various South African Universities.

Of the 23 universities whose enrolment data was available for 2005, CUT ranked a distant 17th when total number of enrolled international students is concerned. However, with 7.0 % international student to home student ratio, CUT ranks 11th. Of the six so called Universities of Technology, CUT ranks 3rd when total international student enrolment is concerned. However, percentage wise CUT ranks next to none of them. This is somewhat encouraging. However, against the background of declining international student enrolment at CUT, much needs to be done to make CUT even more competitive in the local market for international students.

Table 2.2: South African University student summary report for 2005

University	SADC	Other Africa	Rest of the world	No info	Total international	Total students	% international	
1	UNISA	13766	2489	2169	18	18442	212316	8.70
2	UCT	2500	481	1842	37	4860	21731	22.40
3	NWU	3037	126	113	2	3278	39096	8.40
4	UKZN	1552	606	646	-	2804	40761	6.90
5	UP	1318	648	796	2	2764	46351	5.90
6	TUT	1586	284	236	-	2106	57586	3.70
7	UW	1077	530	464	15	2086	23241	9.00
8	NMMU	1301	271	476	-	2048	24132	8.50
9	CPUT	1259	281	296	-	1836	28964	6.30
10	UFS	1207	394	166	-	1767	24789	7.10
11	US	958	307	1085	-	2350	22082	10.60
12	RU	1277	109	226	61	1673	6324	26.50
13	UWC	668	235	18	393	1484	14395	10.30
14	UJ	933	392	130	-	1455	45503	3.20
15	VUT	803	297	11	-	1111	17337	6.40
16	FHU	895	63	7	-	965	8781	11.00
17	CUT	672	17	30	-	719	10319	7.00
18	UL	289	243	27	1	560	17578	3.20
19	DUT	436	29	70	-	535	22704	2.40
20	UZ	139	17	7	-	163	10398	1.60
21	WSUT	89	42	11	-	142	13310	1.10
22	MT	138	2	1	-	141	9860	1.40
23	UV	50	30	-	-	80	10486	0.80

Source: IEASA (2006: 33).

2.4.6 Drivers of internationalisation of education

It was earlier noted that internationalisation of education systems is on the rise all over the world. The Danish Ministry of Education (2004) makes the important point that many people are already studying outside their home country and the number is expected to rise in the coming years. A research finding by Vision 2020 in IEASA (2006:23) found that in 2000, there were about 1.8 million international students world wide and by 2003 the figure rose to 2.1. The same study source estimates that by the year 2020, the number would rise to 5.8 million. Current estimates by Open Doors (1996/97), in Sam (2001: 315),

suggests that up to 1 million students annually study in countries other than their own.

So what accounts for the sudden upsurge of interest? Several possibilities exist. Earlier in Section 1.1 of Chapter 1, it was pointed out that three broad drivers of internationalisation of education were identifiable namely globalisation, drive for innovative sources of income generation (perceived economic benefits), and perceived non economic benefits.

Meanwhile, IEASA (2006:24) acknowledges perceived economic benefits as a key driver by pointing out that the benefits of studying abroad are considerable for student, destination country and home country of the student. It appears that governments and universities all over the world now realise, the economic benefits of admitting international students. According to Ward (2001: 6), economic gains of accepting international students far outweigh the costs associated with it. With pressure on universities to broaden income sources in the light of government cutbacks on University funding, the international students who all over the world normally pay higher fees than home students have become an important source of revenue. This means that countries and universities are driven by the prospect of making economic benefits to internationalise education. It is therefore not surprising that South African Universities have widely opened their doors to as many international students as possible.

Globalisation is seen as another important driver of internalisation of education by Ramphele (no date). IEASA (2006:23) also sees internalisation of education as a reflection of globalisation. Similarly, the Danish Ministry of Education (2004) attributes the upsurge in internationalisation of education to a growing need for highly educated people with international skills of which mobility of students is of vital importance. There is therefore, no better place to acquire such skills than in

foreign countries. In other words, globalisation seems to be driving people to acquire skills that can make them work any where in the world.

Perceived non-economic benefits are seen as a third force behind the drive for internationalisation of education. The literature suggests that international students, home students, destination countries, host institutions, and home countries are believed to derive considerable benefits through inter-cultural contact (see Section 2.3.7 for detailed discussion of benefits and references).

2.4.7 Preferred international student destinations

Although the number of international student is increasing in the developing countries, it seems that the West remains their preferred destination. According to IEASA (2006), in 2005, there were 565 000 international students in the USA, about 200 000 in Australia, and 318 000 in the UK. Compared to the paltry 52 703 international students in South Africa and the 100 000 international students in India (IEASA, 2006:24) for the same period, the figures for the West confirm the developed countries as leading destinations for international students.

2.4.8 Potential benefits of internationalisation of education to South Africa

The working definition in Section 2.2.2 leads to the obvious question, why is the increased inflow of international students into South African Universities so important? It is quite easy to regard this question as naïve. However, its relevance is apparent because of the inability of South African universities to admit all qualifying South African matric holders. Answering the above question requires determination of the net effect of internationalisation of education.

Firstly, on the cultural front, Junius (1997: 11); Duerto (2004: 3); Cigularova (2005: 17); and Geelhoed (2003: 1), among others identify cross-cultural learning

and research opportunities as some of the benefits of internationalisation of education. In Duerto's (2004: 3) view, international students are vital to the quality of teaching and learning in host countries because a multi cultural mix is important in today's world without boundaries that require capacity to think and work across cultures. Citing the works of Nesdale and Todd (2000), and Moi (1989), Geelhoed (2003: 1) contends that interpersonal contacts with other cultural groups are beneficial to all.

Nesdale and Todd's (2000) experiment demonstrated that intercultural interaction significantly influences intercultural acceptance, cross cultural knowledge and openness of Australian students. Similarly Moi (1989) found that the depth of inter personal contact with international students increased the cross cultural sensitivity of participants (Geelhoed: 1). The point being made here is that students from other countries bring cultural diversity to host institutions thereby enabling such institutions to learn about other cultures. Firstly, South Africa has in the past been deprived of much inter cultural contact. Internationalisation of education can therefore correct this handicap. Secondly, it could be easier for South African universities, including CUT, to conduct research on other cultures if they admit enough international students. This research is an illustration of research benefits of internationalisation.

IEASA (2006: 24); and Sam (2001), have also pointed out that study abroad enables students to add international dimensions to their skills, recipient countries and host institutions acquire research and cultural benefits, and home countries benefit when citizens return with knowledge and links with other countries.

Reductions of inter-cultural tension, prejudice, hostility and discriminatory behaviour have also been reported by Klinberg (1970); Mastenhauser (1983); and Paige (1990) in Sam (2001: 315) as some of the benefits of inter-cultural contacts. Given the high level of xenophobia at the University of Johannesburg

as reported by Shindondola (2002), internationalisation of education could help reduce this tension.

In addition to cultural benefits, Ward (2001: 6), Duerto (2004: 2) and Cigularova (2005: 17), to mention just a few, identified perceived economic benefits as a key benefit of admitting international students. Duerto (2004: 2) for example mentioned that each international student in the Madison community of the USA spent no less than \$44384 in 2001 and a total of \$249million in the 1999/2000 academic year. And in 2004, international students spent US\$13.3 in the US (NAFSA in IEASA, 2006:26). According to the same source, international students contribute over £35 billion each year to the British economy. Because of dwindling government funding, extra income from this source could be a major boost for South African universities.

Judging from the above, it seems that a country like South Africa could also derive tremendous benefits from incoming international students. Firstly, with the decreasing government financial support for higher institutions, many South African institutions including CUT will see international students as an innovative way of supplementing their ever dwindling government financial support. The international student provides such an alternative because they are full fee paying. It is a given fact that all over the world, fees for international students are greater than those of home students. Secondly, more intercultural contact should help ease the xenophobia problem. Third, intercultural contact should provide research opportunities that did not exist in the past.

The above would suggest that internationalisation of education is always beneficial. On the contrary, Sam (2001: 316) among others, highlights the limitations to these suggestions by pointing out that they are based on largely unsupported assumptions. These reservations notwithstanding, it is still not surprising that many countries are now opening their university doors wider than ever before to nationals of other countries. As a result, institutions are eagerly

searching for ways to attract more and more international students. In this pursuit, universities and policy makers need to be cautioned about potential pitfalls.

2.4.9 Pitfalls in internationalisation of education

IEASA (2006: 26) observed:

“Competition for international students is hot. The multiple benefits of international education have encouraged many countries to ensure their higher education system is accessible to international students, to promote the quality of their universities, and in some cases rigorously to recruit students in promising ‘markets’.

IEASA (2006: 27) further predicts that among others target markets will be more challenging; the higher education sector in traditional ‘source’ countries will strengthen and absorb more local students; and would be students will face immigration-related and other issues. The list could be very long and never ending. All of these issues have the potential of posing major challenges to internationalisation of education. Educational authorities need clear awareness of as many of these issues as they could in order to be competitive in the global market for students.

Meanwhile, the rapid internationalisation of higher education has led to increased numbers of international students on campuses and the subsequent importance attached to this student segment. While the economic benefits of international students are no longer in doubt, concerns have been raised about increased pressures these students put upon university administrators.

Junius (1997: 7) was one of those who raised this concern in noting that: “Problems and difficulties encountered by international students have caused national concerns”. These problems and difficulties have been linked by a number of writers to difficulties in adjusting to their new environment. It can therefore be argued that adjustment problems constitute a single most important problem encountered by international students who study in countries foreign to them.

In addition, Habu (2000) also highlighted problems of internationalisation (globalisation) of education by reporting on the experiences of Japanese women in the British education system. The study reported that some of the Japanese women students felt their presence was merely tolerated but not encouraged in their academic endeavours. In other words, they were admitted purely for only financial gains and not as true members of a scholarly community in Britain. Simply put, they felt they were being exploited. This means that internationalisation could lead to exploitation.

2.4.10 Overcoming obstacles to internationalisation of education

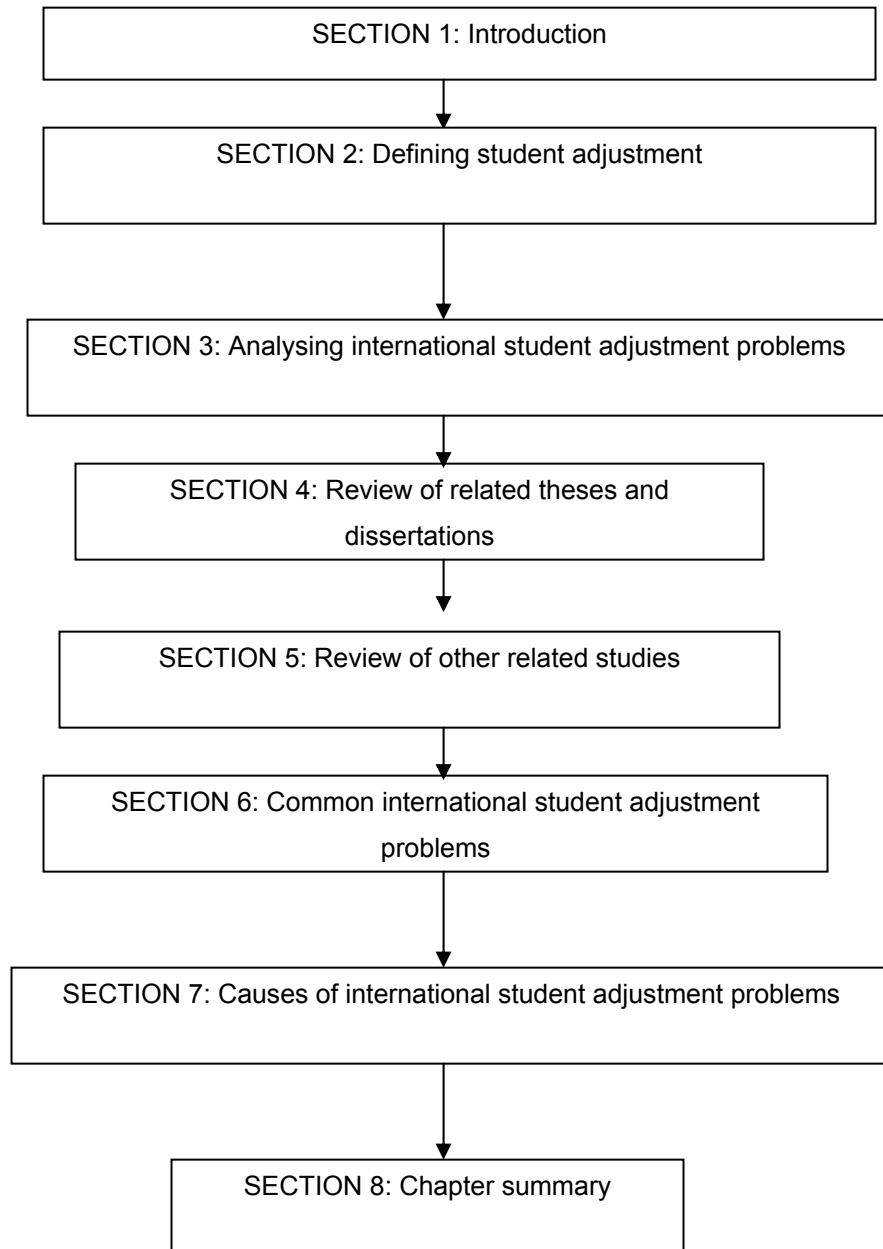
In order to overcome these obstacles there is need for systematic research into the effects of internationalisation of education. This study is about the identification of adjustment problems encountered by international students studying at CUT in the 2006 academic year. The next section explores the international student adjustment problems phenomenon in the context of internationalisation of education.

2.5 CHAPTER SUMMARY

This chapter has illuminated the context in which international student adjustment problems arise, that is, *internationalisation of education*. Some of the available literature was critically examined ranging from the meaning of internationalisation

of education, drivers of internationalisation, major pitfalls to watch out for in internationalisation, benefits of internationalisation as well as obstacles to internationalisation. The next chapter continues the literature review by exploring previous research on the international student adjustment problem.

CHAPTER 3 OUTLINE



CHAPTER 3: REVIEW OF PREVIOUS RESEARCH

Instead of allowing these students to struggle with adjustment problems alone, it would be of prominent importance for all the higher education personnel to understand the fundamental characteristics of their concerns and difficulties.

(Seo & Koro-Ljungberg, 2005)

3.1 INTRODUCTION

The previous chapter was devoted to issues surrounding the internationalisation of education systems across the globe with particular emphasis on South Africa. This was done to elucidate the theoretical foundation for the empirical investigation.

This chapter continues the literature study by exploring several other important aspects of the international student adjustment phenomenon. The purpose of the review is to reflect on important generalisations often made about international students' adjustment problems with the view of identifying those applicable to the flow of international students into South African universities in general and CUT in particular.

The categories into which research on international student adjustment phenomenon can be placed were earlier identified as *national surveys*, *multi-institutional surveys*, and *single institutional surveys*. Each one has its purpose and focus. National surveys focus on all (or a representative sample of) institutions in a country and attempt to identify common problems. Multi institutional surveys focus on a few institutions and attempt to make comparison. As the name suggest, single institutional surveys focus on a single institution and attempt to identify problems akin to individual institution. This limits generalizability of findings. This study is limited to a single institution, that is, CUT.

Student adjustment problems can also be classified as either academic or non-academic. Academic problems relate to teaching and learning issues such as class size, medium of instruction, assessment methods etc. the non-academic problems concern issues such as cultural adjustment, visa problems, xenophobia etc. A number of studies have examined academic problems and non-academic problems separately. A few have combined both categories. The view of the researcher is that the two are inextricably related and therefore have to be studied together. This study is concerned with both academic and non academic problems faced by the various international student segments at CUT.

3.2 DEFINING STUDENT ADJUSTMENT

In order to identify international student adjustment problems, an operational definition is imperative. The need arises because as rightly observed by Al-Sharideh and Goe (1998: 701), there has not been unanimity of opinion on what is meant by the concept of adjustment to university. A unified definition of the concept has not been possible because of its complex and multifaceted nature.

Al-Sharideh and Goe (1998: 701) highlighted this complexity by pointing out that while some use the concept to refer to whether a student experiences specific problems or not, others use it to refer to the process by which students avoid some form of psychological distress. They however note some similarities in definitions by stating that in most cases adjustment is viewed as a transitional process that unfolds over time as the student learns to cope with exigencies of the university environment.

(2004) defined academic adjustment as “strategies and process through which international students avoid or overcome some form of psychological and conceptual distress”.

Maundeni (1999: 28) defines adjustment as “the process whereby individuals enter into physical relationships with their environment”.

Yeung (1980: 51) sees adjustment as “the process of finding and adapting modes of behaviour or attitudes that are suitable to the environment, to changes in the environment, or in response to a new environment”. This definition indicates that in order to survive in a new environment, a person needs to first identify behaviour that does not currently suit the new environment. Once such behaviour is identified there is need to change it to suit the new environment.

Al-Sharideh and Goe (1998: 701) on their part believe student adjustment has to do with the avoidance of psychological distress which manifests in self esteem. They therefore define student adjustment as “the maintenance or achievement of high self esteem by the international student within the context of American university” (Al-Sharideh and Goe, 1998: 709).

In all these definitions the words *process*, *distress*, and *environment* are commonly used. The researcher believes that international student adjustment has to do with their ability to cope with difficulties/problems posed by new social and academic environment in order to achieve their academic objectives. Consequently and for the purpose of this study, international student adjustment is operationally defined as ***the international students’ ability to easily overcome difficulties/problems in the process of adapting to a new social and academic environment at CUT***. This definition allows the researcher to explore both social and academic factors that make the international students’ adaptation to the environment difficult hence have impact on their continued stay in the host institution. The definition also shows the theoretical leaning of the study, that is, the ecological view of student development.

3.3 ANALYSING INTERNATIONAL STUDENT ADJUSTMENT PROBLEMS

Problems experienced by international students are often different. Consequently researchers have analysed international students' adjustment problems based on different factors. Studies have identified a plethora of adjustment problems specific to international students in developed countries that have been categorised into 'themes' (problem areas) such as *communication difficulties*, *social isolation*, *financial concerns*, and *academic adjustment*. Other studies focused on specific adjustment problems instead of the 'theme' based approach.

By examining works of individual writers separately, one is able to gain a wider perspective of the phenomenon than would be possible if a 'narrower' theme based approach was followed. In this study, the works of individuals were examined in order to identify specific issues for grouping under appropriate categories (themes) called *factors*.

Analysis of these individual studies and their associated identified problems (although carried out in the developed world) served as a basis for studying the adjustment problems of international students studying in the South Africa context.

The procedure followed was to explore some relevant and available masters and doctoral dissertations. This was followed by analysis of non-degree research outputs on international student adjustment problems.

3.4. LITERATURE SEARCH

The literature search involved use of CUT library and information service data base, textbooks, hard copy and electronic journals, electronic theses and dissertations, and internet web pages. Access to electronic theses and

dissertations were most problematic as they were all secured and required a fee of \$35 each to obtain. Academic journals were easily accessible through CUT data base using 'ProQuest' and 'Ebscohost'. Some of the articles were obtained using the 'Google' search engine.

3.5. REVIEW OF SELECTED THESES/DISSERTATIONS

This section reviewed selected completed masters and doctoral studies. The literature search produced a number of completed masters and doctoral dissertations and theses on international student adjustment that are relevant to this study (Yeung, 1980; Lanz, 1985; McCalmel, 1985; Barakat, 1988; Wong, 1991; Junius, 1997; Nebedum-Ezeh, 1997; Cheng, 1999; Kono, 1999; Amundson, 1999; Zhang, 2002; Shindondola, 2002; Duerto, 2004; Wang, 2004) Outdated as some of these studies may seem, they provide rich source of information on international student adjustment problem that warrant scrutiny.

Yeung (1980)

This study explored the adjustment problems of international students at the North Texas University in the USA. The focus was on the identification of the specific adjustment problems anticipated by international students prior to departure from their home countries; comparison of differences in anticipated and actually experienced problems; and Investigation of differences in anticipated and experienced problems in relation to certain personal factors.

A self developed five point Likert-type questionnaire was used to collect data from sixty-seven international students. Problem areas were categorised into eight areas namely: communication and language; academic; socio-cultural; psychological-personal; financial; health; housing and food; and international student advising.

Using Fisher's t test, one-way ANOVA, and two-way ANOVA in the analysis of the data, the study identified *financial, language and socio-cultural problems* as the main problem areas for international students. Specific problem issues identified were *understanding American idioms and slang*; participation in class discussions; obtaining financial assistance from the University; expressing oneself in English; adjusting to different accents; writing term papers; saving money for future use; developing English vocabulary; establishing friendship with Americans; and adapting to American food.

The study recommends counselling, and remedial English classes as possible solutions for international students' adjustment problems.

Lanz (1985)

Unlike Yeung (1980), Lanz (1985) did not attempt to identify problems *per se*. Instead, the focus was on the identification of factors that influence academic and social adjustment of international students.

The significance of this study lies in the fact that knowledge of these factors could prove useful for university student affairs officers in designing appropriate programs capable of making the stay of international student easier.

Again, unlike Yeung (1980), Lanz (1985) did not rely on only structured questionnaire. Instead, a mixture of structured questionnaire (the well known Michigan international student problem inventory (MISPI)) as well as an in-depth interview. In all, 72 students were served with the questionnaire. This figure compares with the sixty seven that Yeung (1980) used. For the statistical analysis, Lanz employed the statistical package SPSS.

Library use, understanding of lectures and textbooks were identified by this study as the most important factors influencing academic adjustment. For social

adjustment, it identified “own motivation for knowing about other cultures” as the most important factor.

The study concluded by recommending among others that institutions continuously evaluate services provided to international students in order to identify inadequate areas. It also recommended that universities design and implement extensive orientation program to explain the American (the host country) educational system, culture, values and attitudes to international students.

McCalmet’s (1985)

McCalmet’s (1985) study focused on the construction of an instrument for measuring adult student adjustment problems. The process eventually resulted in the development of a final fifty-five item Likert-type questionnaire.

In addition, the study identified four main problem areas for adult students namely, learning and study skills problems; college services; time management; and stress management. It revealed a positive effect of orientation on adult student adjustment.

Based on the findings, McCalmet (1985) recommends stress and time management skills training program for international students as possible solutions to overcoming adjustment problems.

Barakat (1988)

This study investigated international student adjustment problems regarding eight specific areas namely: financial aid; placement; health services; social/personal; living/dining; orientation; student activities; and international student office

services. Of these, financial aid, insufficient help and discrimination, and health service problems were reported as serious adjustment problem areas.

Recommendations by the above researcher are as follows:

- All appropriate university offices should pay special attention to making international students aware of health services.
- Health insurance and health education should be provided by the university, students should be given specific information about insurance costs, options, and coverage.
- More social and cultural activities for international students.

Wong (1991)

This was a mainly quantitative study aimed at identifying problems common to international students who attended the University of Arkansas, Fayetteville in 1990. In order to develop a questionnaire, the researcher conducted a review of six doctoral dissertations relevant to the study spanning 1980-1988. The review was divided into eight topical areas namely:

- Communication/language concerns;
- Academic concerns;
- Socio-cultural concerns;
- Financial concerns;
- Health concerns;
- Housing concerns;
- Food concerns; and
- Advising concerns.

Responses to questions posed were analysed by the researcher according to certain demographic variables. These include geographical region of origin, sex, age, marital status, and academic level.

The study identified financial, language, socio-cultural, housing and food, and health as the most problematic areas. The study also found variations in the degree of problems experienced from person to person and that country of origin was a significant factor to the international student adjustment.

The study then recommended special English language training program for non-native English speakers. It also recommended cross-cultural counselling, peer counselling, periodic social gatherings and meetings, and regular meetings between international students and foreign students' advisors.

Junius (1997)

Junius (1997) investigated international students' adjustment problems at the Northern Arizona University related to student personnel services namely admissions, orientation, academic process, social, living-dining, health services, religious services, English language, student activities, financial aid, placement and international student services.

The instrument used was a revised form of the famous 'MISPI'. A sample size of 121 international students was used. Like Wong (1991), responses to questions posed were analysed according to certain demographic variables. By and large, Junius' (1997) work seems a replica of the one carried out by Wong (1991).

The study identified living-dining, English language, health services as major areas of concern. Geographical area of origin, age, gender, marital status, academic level, length of stay, and primary language were found to impact on adjustment problems experienced by international students.

Among other important recommendations was that MISPI is an appropriate instrument for identifying adjustment problems of international students because it has been tested for validity. However, the study recommends that researchers delimit the survey to fewer areas and questions, since, respondents complained about the length, hence, time consuming nature of the questionnaire.

Nebedum-Ezeh (1997)

The focus of this study was on the adjustment experiences and coping strategies of African students in white dominated higher institutions in the Western Massachusetts area of the USA.

Factors explored were pre-entry preparation, orientation, acculturation and adaptation, re-entry, social issues, academic issues, relationships, and college environment. It also examined strategies employed by African students to cope with their new educational environment.

Like Lanz (1985), this study employed both quantitative and qualitative strategies in the design of the empirical research and in the analysis of the data. The study reveals inadequate help, inadequate pre-departure orientation, and discrimination on campus, isolation, and lack of social connection to American students as the most problem areas for international students. Based on these findings the researcher recommended a comprehensive orientation program for international students.

Kono (1999)

Like Nebedum-Ezeh (1997), Kono (1999) studied adjustment experiences (but focusing mainly on cultural differences) and coping strategies of international students in their quest for adjustment to the American culture.

The study was entirely qualitative with semi-structured interviews of 30 international students from 13 different countries. Each respondent had to answer 6 open-ended questions. The researcher made audio-recordings which were later transcribed and recurring themes in the recordings identified.

Using Spradley's (1979 and 1980) ethnographic analysis procedure, the researcher identified language, academic, and social factors as the most problematic areas for international students. The main recommendations of this study were English tutoring programs and counselling services for international students.

Cheng (1999)

This study probably ranks the most important literature to be consulted. It therefore deserves special scrutiny. The focus was the determination of adjustment problems experienced by international students at the University of South Dakota in the USA. The researcher used a modified version of the famous MISPI. Statistical processing was done using SPSS package.

Although the empirical study identified financial aid, international student service, and living-dining as most problematic areas for international students at the University of South Dakota, the most important is easily, the finding from the literature survey that **most** international students face adjustment difficulties in the United States.

The researcher, prior to the empirical study reviewed a number of related literatures and came to the following important conclusions:

1. International students want to succeed in their sojourn, but when faced with problems without the ability to overcome them, failure results. This condition might result in emotional conflict for the student.

2. When a university accepts international students, it is also accepting the responsibility to provide services and programs to meet their special needs and circumstances. And in order to meet these responsibilities the universities should have orientation for students because orientation is essential for the cross-cultural adjustment of international students.
3. Social problems of international students are related to social interaction with members of host country, personal issues, attitudes, cross-cultural situations, understanding the host culture, language issues, homesickness, loneliness, and many other social factors.
4. Many international students come from educational and cultural backgrounds that differ significantly from that of the host country. And in order to participate in the host country education, international students must adjust to the host country.
5. One of the most commonly expressed concerns of international students is the lack of sufficient funds.
6. The adjustment problems of international students are based on demographic factors namely age, gender, marital status, academic major, academic classification, language proficiency, length of stay, and primary source of finance.

Although the above conclusions are based on studies carried out in the developed world, they provide guidance for collecting and analysing data regarding international adjustment problems even for third world environments. As such, the above means the following to the current study:

- Although international students at CUT want to succeed in their academic sojourn, their success might be compromised by

emotional conflicts they would experience if they find adjustment problems insurmountable. The study will therefore determine whether or not the adjustment challenges are major, minor or no problems for international students at CUT.

- CUT has to provide services that meet the special needs of its international students needs. The study will therefore determine whether or not student services of CUT pose major, minor or no problems for international students at CUT.
- The social and cultural environment of CUT could pose a major obstacle to the international students since the social and cultural context of university education in South Africa (CUT included) is highly diverse.
- CUT international students would have to adjust to the South African cultural and educational environment that differs from their own.
- It is necessary to examine financial problems that might prove problematic for CUT international students' component.
- Similar to the financial problems, analysis based on certain international student demographics is imperative because adjustment problems of international students are based on demographic factors namely age, gender, marital status, academic major, academic classification, language proficiency, length of stay, and primary source of finance.

Zhang (2002)

This study examined the adjustment experiences of Chinese students at Victoria University in Australia. It focused on cultural impediments to academic adjustment of Chinese students. The research was primarily qualitative based on grounded theory. The argument for the choice of qualitative method was that it enables complex human issues to be explored deeper than quantitative methods would. Semi-structured in-depth individual interviews were conducted on ten respondents. The study found that cultural differences significantly impinged upon academic adjustment of international Chinese students.

Shindondola (2002)

This was the only available literature on the international student experience in a South African institution. The primary focus of this study was international student experience of xenophobia in South Africa (limiting the study to Rand Afrikaans University, now known as the University of Johannesburg). The study utilised qualitative approach in data collection through face to face in-depth interviews with eight international students. Analysis of primary data was also qualitative in nature and accomplished by means of “inductive abstraction generalisation”. This method involved the so called “scissors and tape system” where the researcher after collecting primary data places statements about central themes together. The study found that international students experienced xenophobia. In addition, it reported abuse of international students from other African countries by the police and immigration officials.

Wang (2004)

Like Zhang (2002) above, this study employed qualitative approach relying on phenomenology to explore Chinese students' adjustment challenges. Purposive sampling was used to select four information-rich students. The researcher

applied socio-cultural learning theory in the investigation. By applying social, cultural, and political interpretation to the Chinese students' lived experiences, the study revealed a close interaction between the Chinese students' academic adjustment and socio-cultural environment.

The above theses and dissertations have highlighted some important adjustment issues faced by international students that could prove useful in the construction of a measuring instrument for the current study. They also highlighted a number of ways in which previous students have studied the international student adjustment problem. These include the conceptual and theoretical frameworks used.

3.6 REVIEW OF NON-DEGREE STUDIES

This section continues the literature review by examining the works of some notable experts in the field. As in the previous section, the intention of this exercise was to help identify main adjustment problems, themes, and methodologies employed in the research into the international student adjustment phenomenon that would guide the empirical part of this study.

Williams and Buttler (2003)

Their study was a nationwide investigation into the main concerns of newly arrived international students in the U.S.A. William and Buttler (2003) identified the need for English language acquisition, lack of social support networks, lack of social acceptance, racial labelling, and difficulties in acquiring new learning styles, post traumatic stress syndrome, cultural differences, and development issues as the main problem areas. In addition, their study found that international students did not face the same issues. The research also revealed that some of the concerns related to specific countries of origin. This shows that when

conducting research into international students, one should perform analysis based on country of origin.

Al-Sharideh and Goe (1998)

On their part, Al-Sharideh and Goe (1998) investigated how certain aspects of the social environment provided by an American university impacted on the psychological health of international students. Unlike the previous researches that were descriptive, this study attempted to establish a causal relationship between environment and the international student adjustment.

Disproportionate sampling was used in order to avoid the exclusion of some countries from the study. This was necessary because some countries had only three or fewer students. Data collection was through telephone survey of 175 international students. Loneliness, unfamiliarity with American customs, norms and values, and loss of social status emerged from the study as the main problems international students encountered while studying in the USA. The levels of loneliness, unfamiliarity with American custom, norms, and values and feelings of loss of social status were found to strongly correlate with level of self esteem. This strongly suggests that feelings of loneliness, familiarity with custom, norms, and values of host nation and social status could play an important part in investigating the international student adjustment research.

Cheng, Ding, and Perez (1998)

This study tested the East Asian Student Stressor Inventory (that measures stress levels of East Asian students studying in other countries) and found it to be both valid and reliable. Some of the content areas examined were English efficiency, family pressure, financial difficulties, cultural shock, academic performance, and social support. Another finding was that it reported significant differences in the stress levels of males and females. This indicates that gender

could be an important factor in the adjustment of international students (at least for Asian students). Considering the fact that there are many Asian students at CUT, English efficiency, family pressure, financial difficulties, cultural shock, academic performance, social support, and gender will form part of the variables in the empirical investigation.

Maundeni (1999),

Maundeni (1999) investigated African female adjustment to studying abroad and concluded that the disadvantages and problems faced by African women studying abroad are based in their own cultures, and that they are compounded when such students study abroad. He further went on to say that the adjustment of female African students abroad is more difficult than those of their male counterparts. This statement supports Cheng *et al* (1998) who earlier found differences in stress levels for male and female Chinese international students. This again makes a strong case for the inclusion of gender in the study of international student adjustment.

Leung (2001)

This researcher contends that while there are some similarities in matters relating to international student adaptation, different migrant groups studying in Australia acculturate at different rates. This argument was based on his (Leung's, 2001: 258) study which showed that Chinese international students felt lonelier, are least confident socially, and least confident with their academic studies compared with international students from other cultural backgrounds. He therefore suggests that when planning for the needs of students, university administrators should consider the specific needs of all cultural groups.

Sandhu (1994)

This study highlights several international students' adjustment issues that warrant scrutiny. Firstly, Sandhu (1994: 230) points out that there is a general consensus that international students have more adjustment problems in American universities than the native students yet, they have fewer resources than their counterparts to solve their adjustment problems. This means that if left alone, international students will find it difficult to adapt.

Relying on research by Sandhu and Asrabadi (1994), Ebbin and Blackenship (1986), and Zwingman (1978), Sandhu (1994: 230) identified insomnia, anxiety, depression and sexual dysfunctions as the most frequent health problems of international students and alienation, nostalgia, and a sense of helplessness as other adjustment problems faced by international students. Sandhu (1994: 230) also believes that there are six principal factors in the form of *perceived discrimination, homesickness, perceived hate/rejection, fear, culture shock/stress due to a change, and guilt* that contribute significantly to the adjustment problems of foreign students. These are pointers to the multiplicity of adjustment problems faced by international students.

However, Sandhu (1994) is of the opinion that in reality, international student adjustment can be grouped under two main categories namely **intrapersonal** and **interpersonal**. **Intrapersonal factors** include *profound sense of loss, sense of inferiority, sense of insecurity, and sense of uncertainty*, and **Interpersonal factors** include *communication problems, culture shock, loss of social support system, and miscellaneous factors* (Sandhu, 1994: 231).

From the above survey of the literature in Sections 2.4.1 and 2.4.2, it becomes evident that there are numerous factors that impinge on the foreign students' ability to adjust to their new environment. Since research into the international students' adjustment problem in developing countries in general and South Africa

in particular is a virgin area, this study can be regarded as exploratory. As such, one is tempted to include as many factors as possible in order to isolate the most important ones. However, due to time and other logistical constraints this is not possible. Consequently, the following section focuses on identifying the most important factors as a basis for conducting the empirical investigation. There is bound to be validity and reliability implications in trying to limit the number of factors. These concerns are fully addressed in the chapter on methodology.

3.7 MOST COMMON INTERNATIONAL STUDENT ADJUSTMENT PROBLEMS

The literature review shows that international students' adaptation to a new cultural and educational environment is a complex process. Kono (1999: VI) attested to this. Several adjustment problems were identified in the literature review. Careful examination of the literature, however, indicates that the sort of problems most commonly faced by international students can be classified under the following dominant problem areas:

- Social/cultural problems
- Academic problems
- Personal problems/motional problems
- Financial problems
- Financial aid from host institution problems
- Housing/accommodation problems
- Food problems
- Health problems
- Immigration/visa problems

For the purpose of this study, all of the above problem areas were considered relevant. These problem areas form the questionnaire categories. Individual

problems (dependent variables) are then placed under these problem areas in the questionnaire (see Annexure A).

The literature survey in the previous sections also shows that international students' adaptation process is highly influenced by demographic variables such as:

1. Geographic region of origin
2. Age
3. Gender
4. Marital status
5. Academic level

These (independent) variables were used to analyse and compare adjustment problems of international students at CUT.

3.8 COMMON CAUSES OF INTERNATIONAL STUDENTS' ADJUSTMENT PROBLEMS

Given the multiplicity of adjustment problems encountered by international students the obvious question becomes what causes these adjustment problems? Perhaps in an attempt to answer this vexatious question, Sandhu (1994: 230), wrote:

In a distant land, several miles away from home, it is frightening to establish a sense of belonging. The demands of the host culture might be quite different in many aspects from one's own culture and the lifestyle might be totally at odds with one's experiences in the native country. A large number of foreign students who come from the underdeveloped countries to the USA have to face such

dilemma when they are required to make a number of personal, social and environmental changes upon arrival.

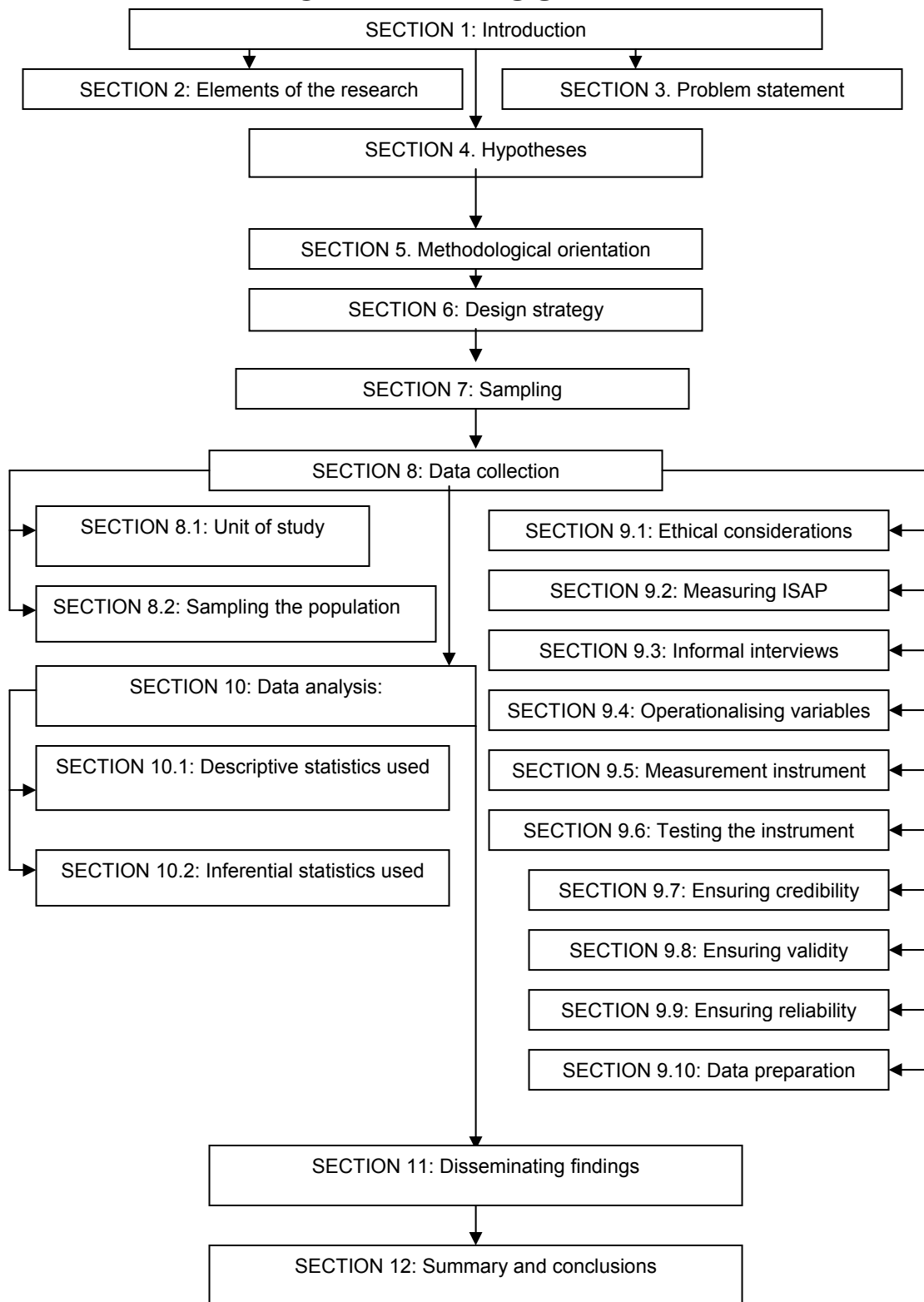
From this view point as well as the kinds of problems identified in the literature, personal, social and environmental factors appear responsible for the kinds of adjustment problems encountered by international students.

CHAPTER SUMMARY

Many international students arrive in their host institutions without full awareness of the enormity of adjustment hurdles they must overcome to be successful academically in their new environment. This chapter has highlighted the main adjustment challenges encountered by international students in the developed world that may have a significant bearing on the kinds adjustment experiences international academic sojourners are likely to face in universities in developing countries. It has also provided insight into data collection methods, sampling techniques and sample sizes used, as well as inferential statistics used by past researchers on the topic. These lay the foundation for the next chapter.

In Chapter 4, the methodology applied to the empirical investigation is presented.

CHAPTER 4 OUTLINE



CHAPTER 4: METHODOLOGY EMPLOYED

A well-formulated problem is already a half-solved problem

(Bless & Higson-Smith, 2005:25)

And

A good problem generally relates to some sort of standard methodology

(Anderson & Arsenault, 2002:41)

4.1 INTRODUCTION

Bless and Higson-Smith (2005: 25) state that in any research, the problem to be investigated must first be identified, followed by gathering of background information through literature review. In Chapter 1, the research problem was introduced. The literature related to international student adjustment problem was reviewed in Chapter 2. In the same chapter, the connection between international student adjustment problems and internationalisation of education was also critically examined. The literature review in Chapter 2 resulted in the identification of possible adjustment issues pertinent to international students in South African universities. This chapter follows on the previous ones by describing the methodology applied to the empirical study.

4.2 ELEMENTS OF THE RESEARCH PROCESS

Similar to the approach adopted by Amundson (1999), the research process used to guide the collection and analysis of the data consisted of four main steps: 1. Pre-interview stage, 2. Interview stage A, 3. Interview stage B, and 4. Data analysis and reporting stage.

Pre-Interview stage

This stage involved literature search, literature review, deciding on research methodology including selection of data collection and data analysis methods, deciding on sample size and sampling techniques, and questionnaire design. A full account of the literature review was presented in Chapters 2 and 3. The methodology employed in the empirical study is presented elsewhere in this chapter.

Interview stage A

This stage involved interviewing selected international students enrolled at CUT in 2006 on an informal face-face basis. A detailed discussion of issues addressed is provided in the appropriate section in this chapter (see Section 4.9.3).

Interview stage B

At this stage, structured questionnaires were used to collect primary data from a sample of the international student population. Contents of the questionnaire are discussed in the appropriate section (see Section 4.9.5).

Data analysis, reporting, and recommendations stage

Analysis of data collected, reporting the findings as well as recommendations are also presented in the appropriate chapters (see Section 4.10).

4.3 RE-STATEMENT OF THE PROBLEM

From the literature survey in Chapters 2 and 3, it is clear that international students have now become an important student component of most universities including CUT. The literature also indicate that university administrators now face

the task of attracting and retaining more and more international students. Yet there is lack of research on international student adjustment phenomenon as it relates to South Africa. This situation must be worrying to administrators in South African universities because it will make their understanding of the kind of problems international students face very limited. The problem is that should university student administrators encounter adjustment problems of their international students they will have no prior knowledge or guideline to fall on to guide them in finding solutions. Thus South African universities will battle to attract and retain international students.

The literature review in Chapter 2 indicated a number of positive spin-offs from admitting more and more international students. It is therefore logical for universities to admit more international students. It is not surprising that like all other South African universities, CUT has also opened its doors wider than ever before to international students. However, a thorough understanding of the ISAP remains a key to realising this objective. Maundeni's (1999) conception of the consequences of student adjustment has serious implications for CUT in this regard.

According to Maundeni (1999: 28), positive adjustment occurs when the student experiences harmony with the environment and negative adjustment occurs if student experience is not harmonious. Acceptance of this assertion means that universities must create conditions that would make international students live in harmony with their environment. This in turn means a clear understanding of problems that international students face. This need arises because the possibility exists that difficulties encountered in adjusting to a new educational environment have the potential of influencing international students' decision not to return. A further possibility exists that dissatisfied international students could spread their experiences by word of mouth hence discouraging potential international students from enrolling.

In light of the above, the following research questions were identified in Chapter 1 and are re-stated as follows:

1. What are the major adjustment problems for international students studying at CUT?
2. What is CUT international students' overall assessment of their adjustment experience at CUT?
3. Are there any significant differences in adjustment problems based on country/region of origin?
4. Are there any significant differences in adjustment problems based on gender?
5. Are there any significant differences in adjustment problems based on age?

4.4 AIM OF THE STUDY

The overall aim of this study was also stated in Chapter 1 as the identification of the main adjustment problems that international students studying at CUT have to deal with so that appropriate support systems could be developed that could help in the recruitment and retention of this minority yet important student segment. In order to achieve this broad aim, the following specific hypotheses were posed:

4.5 HYPOTHESES GUIDING THE RESEARCH

In Section 4.3 above, five research questions were posed. In order to answer research questions, Tredoux and Durrheim in Dzansi (2004:180) advises that they must first be translated into testable *null* and *alternative* hypotheses. Quoting Cooper and Schindler (2001); and Sekaran (1992), Dzansi (2004:180) went on to describe *hypotheses* as “educated guesses about a problem’s

solution”. Dzansi (2004:180) further explains the concept of hypotheses as follows:

*The **null hypothesis**, which is usually represented by H_0 , is a statement that maintains that there are either no differences between groups or no relationships between measured variables. In contrast the **alternate hypothesis** represented by the symbol H_a maintains that there are differences or relationships between measured variables. Therefore, the **alternate hypothesis** makes a conjecture that is diametrically opposed to the **null hypothesis**. Thus depending upon the hypothesis either of the two will apply.*

In this study, both *null* and *alternate hypotheses* were provided to assist in answering the research questions.

An important finding from the literature review in Chapter 3 was that adjustment problems could vary according to demographic characteristics of international students. Although many explanatory demographic variables could be used, time and the scope of this study could not permit. Consequently the decision was made to use country/region of origin, gender, and age (see chapter on suggestions for further research for further discussion).

Research question 1 did not warrant a hypothesis as this could be answered directly from answers provided by participants. Question 2, 3, 4, and 5, were however transformed into hypotheses 1, 2, 3, and 4 below.

(H_{1o}): International students at CUT do not perceive their adjustment experiences as difficult.

(H_{1a}): International students at CUT perceive their adjustment experiences as difficult.

(H_{2o}): Perceived adjustment problems facing international students studying at CUT do not differ significantly based on Nationality/geographic region of origin.

(H_{2a}): Perceived adjustment problems facing international students studying at CUT differ significantly based on Nationality/geographic region of origin.

(H_{3o}): Perceived adjustment problems facing international students studying at CUT do not differ significantly based on gender

(H_{3a}): Perceived adjustment problems facing international students studying at CUT differ significantly based on gender

(H_{4o}): Perceived adjustment problems facing international students studying at CUT do not differ significantly based on age.

(H_{4a}): Perceived adjustment problems facing international students studying at CUT differ significantly based on age.

4.6 METHODOLOGICAL ORIENTATION

Before stating the *methodology* applied to the study, it is important to first provide meaning for the term *methodology* as used in this study. The problem is that some researchers use the terms *methodology*, *methods*, and *paradigms* interchangeably hence the potential for confusion even to the most sophisticated reader strongly exists.

McMillan and Schumacher (2001: 9) opined that research *methodology* and *methods* both mean “the way in which a researcher collects and analyses data”. Terre Blanche and Durrheim (2004: 6) see *methodology* as “how the researcher practically goes about (the procedures used in) the creation of new knowledge”. Seal (2004: 53) on his part, defines *methodology* as “how one goes about studying any phenomenon”. He went on to classify *methodologies* as either *quantitative* or *qualitative*. Babbie and Mouton (2005:49) use the terms

methodological paradigm and *methodological approach* interchangeably to mean *methods* and *techniques* as well as the underlying principles and assumptions that social researchers use. Additionally, Creswell (1994: 4) classifies *paradigms* as either *quantitative* or *qualitative*. Terre Blanche and Durrheim (2004: 6) categorise *paradigms* as *positivist*, *interpretive*, and *constructionist* and *methodologies* as *quantitative* or *qualitative*. With all these interpretations, there is clearly no shortage of sources of confusion when using the term *methodology* in research.

The above notwithstanding, the term *methodology* seems to refer to the assumptions and principles that underpin research practice. That is, it generally seems to mean the philosophical framework guiding a researcher's research practice. Therefore, the term *methodology* as used in this study refers to *the philosophical framework guiding a researcher's research practice*.

Using Terre Blanche and Durrheim (2004: 6) classification as reference point, this study employed mixed methodologies (quantitative and qualitative) to the data collection and analysis within the positivist and interpretive paradigms. These personal leanings eventually shaped the questions posed and the choice of design.

4.7 DESIGN STRATEGY

As mentioned in Chapter 1, this is an exploratory, formal, and cross-sectional study aimed at investigating typical adjustment problems of international students in a South African University.

It is *exploratory* in the sense that although the international student adjustment phenomenon has been well researched in the western world, not much of it is known in the developing countries let alone South African context. Bless and Higson-Smith (2005: 37); Babbie and Mouton (2005: 80), all confirm this view by

arguing that a research is *exploratory* when little is known about the research topic in a particular context.

A *mixed method* approach was adopted for data collection. By *mixed method* is meant that both *quantitative* and *qualitative* approaches were used.

Some researchers adopt a single approach relying exclusively either on quantitative design or qualitative design. Each approach has its merits and demerits. In order to counter the demerits of each design approach hence enhance the quality of the findings, it was decided to use the mixed method approach. This does not mean that the mixed method (sometimes called triangulation method) is flawless. In fact, this approach has as many critiques as the single method approach. Nonetheless, the researcher feels that a mixed method approach to data collection would add value to the findings.

4.8 SAMPLING PROCEDURE

The decision whether to sample or do complete census is normally influenced by the population size and design strategy. For example, if one were doing a purely qualitative research, the obvious choice would be to select a manageable but adequate sample. On the other hand, if one was doing quantitative study for a limited population the sensible thing to do would be a complete census. However, if the research is quantitative with a large population, a reasonable sample would be adequate. Because the study is mainly quantitative and the population of 460 is regarded as large, sampling is adopted. Like Al-Sharideh and Goe (1998) this study employed **disproportionate** simple random sampling in order to avoid the exclusion of some countries from the study. This was necessary because some countries had few students.

Unit of study

The unit of study was the individual international student studying at CUT (see Chapter 1 for definition of international student). The study was conducted at a single South African university, i.e. the Central University of Technology (CUT). The choice of a single institution instead of many was influenced by a number of factors but mainly convenience, ease of access to students as well as economic considerations.

Sample size

The target population was all international students enrolled at CUT in the year 2006. The total number of international students enrolled at CUT by June 30 2006 amounted to 490. Using disproportionate simple random sampling, 120 international students were selected. Prior to the sampling, personal interviews were held with 12 purposefully selected students from the cross-section of the international student population at CUT. The criteria used were information rich, willing student, and those who could communicate fluently in English. This was done to determine whether themes would emerge that differ from those obtained from the literature review. Generally, the results justified the choices of problem areas already made as no new insights were provided by these interviews. This compares well with the sample sizes used in the theses and dissertations consulted in Chapter 3 where the highest sample size was 175 and the lowest was 68. It must be noted that the American universities in which these studies were carried out had very large populations of international students compared to the international student population at CUT. Therefore, the sample size of 120 was considered adequate.

Response rate

120 questionnaires were sent out. Out of this, 98 were returned thereby yielding approximately 82% response rate. This rate was considered excellent in view of the fact that the year end exams were in progress at the time. Besides, similar studies reported comparatively lower response rates. Cheng (1999) for example reported a 64% response rate while Barakat (1988) reported as low as 50% response rate. Of the 98 returned questionnaire 91 were found to be usable.

4.9 DATA COLLECTION

The following sections describe how primary data were collected from international students as well as other issues related to data collection, key among them being ethical matters.

4.9.1 Ethical considerations

“Social research should be ethical” Denscombe (2005: 134). In fact, ethics in research has become an important issue these days. Because of this growing importance, no effort was spared in ensuring that in the conduct of this study, all relevant ethical issues were sufficiently addressed.

Gay and Airasian (2003:79) rightly put the importance of ethics in research this way:

All researchers must be aware of and attend to the ethical considerations related to their studies.....In research, the end do not justify the means, and researchers must not put their need to carry out their research above the responsibility to maintain the well-being of the study participants...

Denscombe (2005: 134) argues that whether in data collection, data analysis, or in the dissemination of findings, researchers must:

1. Respect the rights and dignity of participants
2. Avoid causing any harm to participants
3. Operate with honesty and integrity

Although a number of ethical areas of concern have been identified, the following three are of particular relevance to this study:

- **Informed consent**
- **Anonymity**
- **Gaining trust**

Ensuring participants' anonymity

The greatest concern for the participating international students was anonymity. Many felt that without this, they might be victimised for voicing out dissatisfactions. This concern made the planned focus group discussions impossible. Alternative face-to-face interviews were held with willing participants with the guarantee of total anonymity. Consequently, there were no tape recordings. Also, questionnaires used contained only codes that corresponded to participant names (with identities known only to the researcher and no one else).

Gaining participants' trust

This was not too difficult to achieve. A number of the international students were already aware that the researcher himself has an 'international' background. Those who were not aware were informed. The effort was made to explain the researcher's own personal adjustment experiences. As a result of this exercise, the international students' generally felt they were dealing with one of their own "kind" and therefore agreed to participate.

Obtaining participants' informed consent

Informed consent although not always possible rests on certain premises. Denscombe (2005: 138) mentioned two premises upon which informed consent rests namely:

- People should never be forced into participating in research, that is, participation must always be voluntary.
- Participants must have sufficient information about the research to arrive at a reasoned judgement about whether to participate or not.

In order to gain informed consent of participants, international students were given all necessary information about the reason for the study and areas to be covered in the questionnaire, as well as explanation of the need for the study. None of the international students were forced to participate. In fact, international students were given the chance to opt out if they felt the least threatened. A testimony of the voluntary participation is the abandonment of the focus group discussions because students felt threatened in open discussions. The twelve students who took part in the informal interviews were all volunteers. Additionally, consent of university research ethics committee was obtained upon submission of the research protocol and questionnaire.

4.9.2 Measuring international student adjustment problems

The question of how to measure international student adjustment problems in the South African context was a major problem the researcher had to deal with. Although there is no shortage of questionnaire, all existing ones were designed specifically for studies in western countries. The real question was whether these instruments are suitable for South African universities whose conditions are quite different from those of western countries such as Canada, the USA and Australia where these previous studies were undertaken.

After much deliberation and insight provided by the informal interviews (see Section 3.9.3), it became clear that wholesale usage of any existing instrument was not advisable. Consequently, a custom made questionnaire (integrating aspects of various existing questionnaire with addition of own perspective) was developed. This naturally raised validity and reliability issues which are fully addressed and reported in appropriate sections that follow (see Sections 4.9.7.1 and 4.9.7.2).

4.9.3 Informal interviews

As indicated earlier, face to face informal interviews replaced the initial focused group discussion because of the student's refusal/reluctance to participate. Like the abandoned focus group discussion, the aim of the informal interviews was to discuss issues identified in the literature review with the view of gaining new insights that could be incorporated in the final questionnaire. The main reason for refusing any form of group discussion was the need for anonymity. Most international students considered the topic of investigation a 'highly sensitive issue' that could not be discussed in 'public'. They felt contributions could be linked to individuals with possible repercussions.

Approaches were therefore made to international students for one-on-one interviews with no voice recordings. In all 12 international students volunteered information through the face-face interviews. Although this exercise yielded no new insights which could enrich the final questionnaire, it did confirm the problem areas identified in the literature review.

4.9.4 Operationalisation of variables

According to Babbie and Mouton (2005:113), concept clarification is a key element in qualitative research (note that this study is both qualitative and quantitative). In their view, clarification of concepts is a continuum that can be achieved through four measurement steps (conceptualisation, nominal definition, operational definition, and measurement) in that order. In Section 2.2.2, the conceptual framework for the study was stated. This was followed by presentation of the nominal definition of the concept “international student adjustment problems” as: *the difficulties and challenges that international students have to deal with and overcome as they go about adapting to their new educational and social environments.*

The literature review and informal interviews provided much information on variables to be included in the final questionnaire. In order that the instrument actually measured all facets (entire domain) of the concept “adjustment problems” of international students in the South African context, the chosen variables were *operationalised* into observable indicators as recommended by Sekaran (1992:152); Terre Blanche and Durrheim (2002: 80); and Tredoux and Durrheim (2002: 202). This method involved identification of the behavioural dimensions, facets or properties of the concept ‘adjustment problems’ and then categorising them into observable and measurable elements (see Figure 4.1 below). This method was successfully employed by Dzansi (2004: 187) in operationalising the concept of *business social responsibility* (BSR) for measurement.

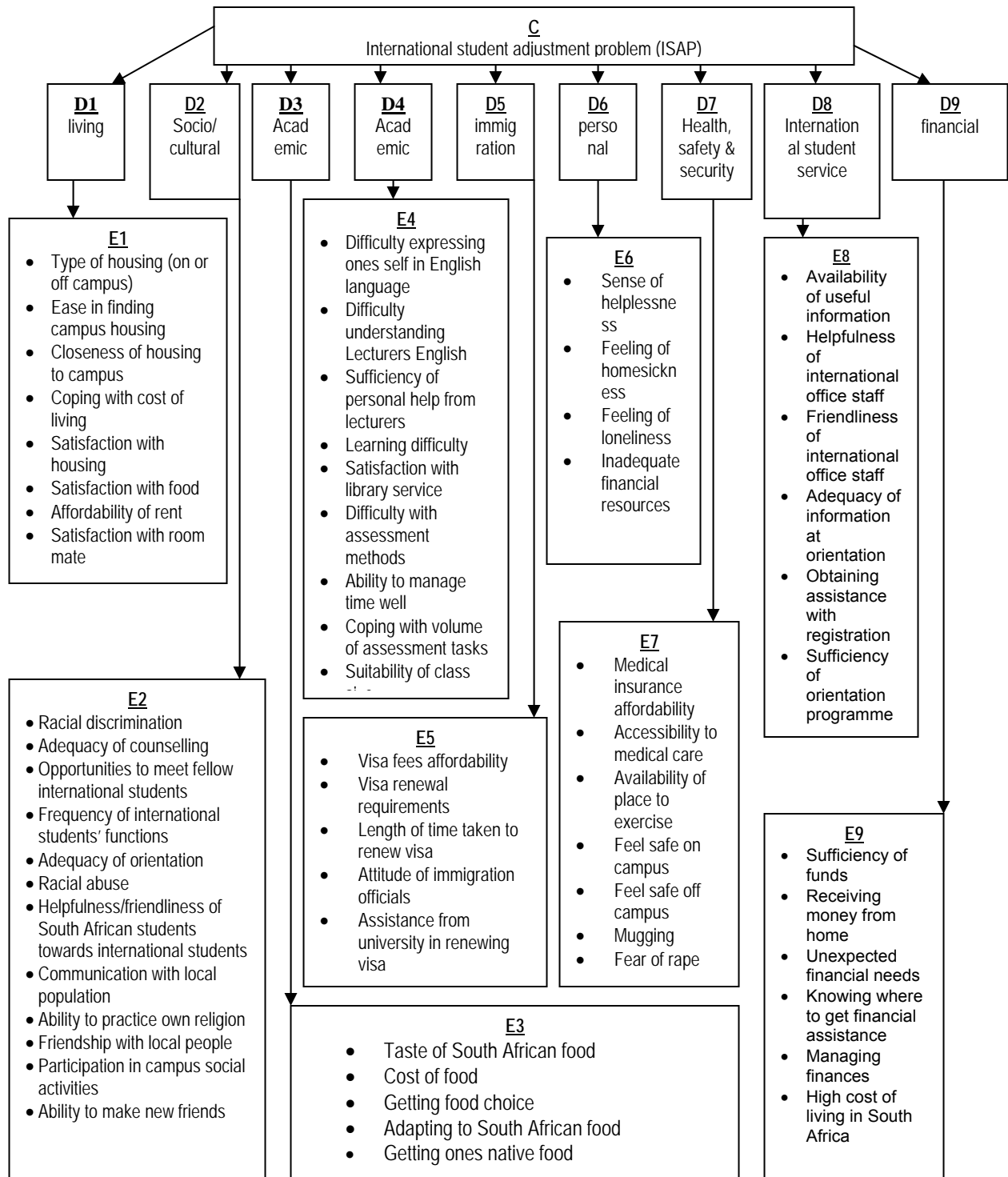


Figure 4.1 Dimensions (D) and Elements (E) of international student adjustment problems. (Own compilation).

The literature review in Chapter 3 revealed a plethora of adjustment normally encountered by international students. However, on careful analysis these problems, the following areas emerge as the most frequent problem areas for international students that could possibly be relevant to the current study:

- Social/cultural problems
- Academic problems
- Emotional/personal problems
- Financial problems
- Housing/residence problems
- Food problems
- Health
- Immigration/visa problems
- International student advisory service

This list was used as problem areas (dimensions) in this study. The dimensions were then broken down into observable and measurable elements as illustrated in Figure 4.1.

4.9.5 Measurement instruments used

As already indicated, 62 item four point rating scale otherwise called Likert Scale questionnaire was used to collect primary data for analysis. According to Tredoux and Durrheim (2002: 204), the Likert Scale is useful in measuring people's opinions and is very easy to complete (Dzansi, 2004).

Scaling is a contentious issue in measurement. Some believe the five point scale is a better choice than the four point scale adopted in this study. The choice of the four point scale was influenced by the desire to prevent respondents from what is known as the 'middle of the road' approach where respondents simply mark the middle value (3). The structured questionnaire included the following sections (see Appendix A for the final questionnaire):

Section A: Demographic data.

This section required participants to provide information on the following basic demographic data:

- Country of origin
- Medium of instruction in home country
- Gender
- Age
- Marital status
- Academic level
- Type of housing (on or off campus)

Sections B - J: student adjustment questions

In this section, participants were required to indicate the degree to which they experienced certain problems as:

1. No problem;
2. Minor problem;
3. Moderate problem; and
4. Major problem.

Housing/residence problems

- Ease in finding campus housing
- Closeness of housing to campus
- Coping with cost of living
- Satisfaction with housing
- Satisfaction with food
- Affordability of rent
- Satisfaction with room mate

Socio-cultural problems (both campus and off campus)

- Racial discrimination
- Adequacy of counselling

- Opportunities to meet fellow international students
- Frequency of international students' functions
- Adequacy of orientation
- Racial abuse
- Helpfulness/friendliness of South African students towards international students
- Communication with local population
- Ability to practice own religion
- Friendship with local people
- Participation in campus social activities
- Ability to make new friends

Academic problems

- Difficulty expressing oneself in English language
- Difficulty understanding Lecturers English
- Sufficiency of personal help from lecturers
- Learning difficulty
- Satisfaction with library service
- Difficulty with assessment methods
- Ability to manage time well
- Coping with volume of assessment tasks
- Suitability of class size

Immigration problems

- Visa fees affordability
- Visa renewal requirements
- Length of time taken to renew visa
- Attitude of immigration officials
- Assistance from university in renewing visa

Personal/emotional problems

- Sense of helplessness
- Feeling of homesickness
- Feeling of loneliness
- Inadequate financial resources

Health, safety and security problems

- Medical insurance affordability
- Accessibility to medical care
- Availability of place to exercise
- Feel safe on campus
- Feel safe off campus
- Mugging
- Fear of rape

Financial problems

- Sufficiency of funds
- Receiving money from home
- Unexpected financial needs
- Knowing where to get financial assistance
- Managing finances
- High cost of living in South Africa

International student advisory service

- Availability of useful information
- Helpfulness of international office staff
- Friendliness of international office staff
- Adequacy of information at orientation
- Obtaining assistance with registration
- Adequacy of orientation programme

Sections K: Student rating of the questionnaire

Students were asked to indicate the degree to which they agree with certain statements on:

- The usefulness of the questionnaire in identifying adjustment problems
- Willingness of future participation in focus group discussion

4.9.5.1 *The four point rating scale used*

In order to answer research question 1 and 2, percentage analysis of responses and rank ordering were carried out. This involved the calculation of frequencies of no problem (none); minor problem (minor); moderate problem (moderate); and major problem (major) responses and their conversion to percentages. Wong (1991) using a five point scale considered a combined 3, 4, and 5 scores to determine severity of adjustment problems for international students at the university of Arkansas. In that study, an item with a combined score of 35% was considered a great difficulty. In this study, a four point scale was used. In order to determine the degree of difficulty, scores of 2 = minor problem; 3 = moderate problem; and 4 = major problem were combined. For this study, it was decided that an item with a combined score of 40% or more is a great difficulty.

4.9.6 Testing the instrument

The instrument was tested on 12 randomly selected willing international students in order to identify ambiguities that might need rectifying. This exercise resulted in a fine-tuned final questionnaire (see Appendix A).

4.9.7 Ensuring credibility of the research

Credibility has to do with practicality, reliability and validity of the measuring instrument. Because reliability and validity attracts so much attention in research, this section discusses validity and reliability issues encountered in this study.

4.9.7.1 Ensuring measurement validity

The validity of a measuring instrument refers to the extent to which the instrument measures what it is supposed to measure (Leedy and Ormrod, 2005: 28; Bless and Higson-Smith; Zikmund, 2003: 302). Although there are several types of validity in research, three most common types of measuring instrument validity are often mentioned. These are *content validity*; *construct validity*; and *criterion-related validity*. Although the instrument used in this research is largely an own compilation, the extensive literature search resulted in the identification and inclusion of recurrent themes and factors previously used. As such validity of the current instrument should not really be a serious issue except to determine whether the instrument is really valid in the South African setting. This can only be ascertained through replication which the researcher intends to undertake in the near future.

Of the three validity issues, steps were particularly taken to ensure content validity and construct validity. No attempt was made to assess criterion validity because this required comparison with an existing instrument. Since the literature search did not reveal any instrument specific to the international student experience in South Africa no meaningful comparison could be made.

Content validity

The content validity otherwise known as face validity of a measuring instrument is the extent to which the instrument provides adequate coverage of the concept. In other words it is about the sufficiency or comprehensiveness of the investigative questions. McMillan and Schumacher (2001: 243) warn that locally devised instruments with no history of use or reviews by others need to be evaluated with care. Cohen, Manion and Morrison (2005) argue that each issue might not be addressed in its entirety because of the time available and the length of the questionnaire. According to Copper and Schindler (2001: 211), if the instrument

contains a representative sample of the universe of the sample, then content validity is good. Gay and Airasian (2003: 586) believe content validity depends on expert judgement.

For the current study the time available was not sufficient to send the questionnaire to experts across South Africa. Use was however made of the study leader who is a seasoned researcher with vast experience in the use of this type of questionnaire. Additional input was sought from other seasoned researchers at the University of the Free State and CUT. Thus in a sense expert opinion could be said to have been sought.

To ensure adequacy of the investigative questions (that is the coverage of the whole domain of student adjustment), the *dimensions* and *elements* of of the construct 'international student adjustment problem' were identified. This enabled *all* areas of the construct to be covered. Finally, the questionnaire was compared with existing instruments and together with the study leader who is a seasoned researcher, it was decided that content validity is good enough.

Construct validity

Gay and Airasian (2003: 586) describe construct validity as the degree to which a test measures an intended hypothetical construct. In other words it testifies to how well the results from the use of the measures fits the theories around which the test is designed (Sekaran, 1992 in Dzansi, 2004: 189). Cohen, Manion and Morrison (2005: 110) state that in this type of validity agreement is sought on the 'operationalised' form of the construct. That is clarifying what the meaning of the construct as used by the researcher. In Section 4.9.5, the construct 'international student adjustment problem' was operationally defined. As stated above, the extensive literature survey resulted in the identification of the theories about adjustment. This included cultural, social and academic context within which the international students find themselves and have to adjust to. It is therefore clear

that the sections in the questionnaire fit well with these theories. None the less, the researcher intends to undertake a separate research in the future to investigate the construct validity of the current instrument using factor analysis.

4.9.7.2 Ensuring measurement reliability

How reliable a measuring instrument are also impacts on the credibility of research findings. Zikmund (2003: 300) defines instrument reliability as the degree to which an instrument is free from errors and therefore yields consistent results. According to Saunders, Lewis and Thornhill (2000: 101) the following errors are the major causes of instrument unreliability:

- Subject error
- Subject bias
- Observer error
- Observer bias

As Dzansi (2004: 190) points out, an instrument can never be 100% reliable because it is just impossible to completely eliminate threats to reliability. All attempts were therefore made to minimise the occurrence of errors that can compromise the reliability of the measuring instrument in this study.

Minimizing subject error

Subject errors usually refer to the situation whereby the respondents are not representative of the population under investigation. In order to minimise miss representation, international students are clearly defined and only those who had positive identifications were included.

Minimizing subject response bias

Response bias or error can occur when subjects deliberately provide inaccurate responses, refuse to answer certain questions or when the response rate is very low. Care was taken to frame questions so that respondents do not view them as intrusive. The questionnaires were also hand delivered and the interviewers (four final year B.Tech. Project Management students who have already passed their research methodology course) were always present and assisted the in the completion of the questionnaire

Minimizing observer error and observer bias

Different approaches used by different interviewers are the main cause of observer error. The informal interviews were conducted by the researcher only thus uniformity in questioning was assured. The structured questionnaire partially ensured that the questions were the same. The questions were framed in simple and unambiguous English to avoid interviewers and interviewees misinterpreting them.

4.9.8 Data preparation

The returned questionnaires were thoroughly prepared for analysis. This involved data editing/cleaning, handling blank responses, coding and processing.

4.9.8.1 *Editing/cleaning the data*

Editing or cleaning data means the checking of data and correcting any errors such as respondents inadvertently failing to answer questions. Only a few such cases occurred and respondents were traced and corrections made. This process although time consuming was deemed necessary in order to avoid having to discover errors after analysis had been done.

4.9.8.2 Data coding

Data coding means applying a set of rules to data so as to transform information from one form to another. In research coding usually involves converting responses in questionnaires into numeric form in order to facilitate quantitative analysis. The 4 point Likert scale used took care of this aspect as the scales were in numeric form. Once the questionnaires were returned and edited responses were transferred into the column titled “for office use only” (see Appendix A).

4.9.8.3 Data processing

Data processing proved very problematic. Institutional arrangements at CUT did not allow the researcher to get required assistance from CUT with regard to analysing the data. Even when it came it was belated.

4.10 STATISTICAL PROCEDURES AND TREATMENT

“The main reason for collecting data in any research is to answer research questions. But for research questions can be answered, the data collected have to be interpreted. In other words it has to be explained and given meaning. But before this can be done the data collected needs to be analysed”.

(Dzansi, 2004: 197)

In quantitative research, data analysis is normally used to refer to the process of breaking down of collected data into constituent parts in order to obtain answers to research questions. In other words, data analysis involves the process of reducing data into intelligible and interpretable form so that the relations of research problems can be studied, tested, and conclusions drawn (De Vos, et al. 2002: 223).

Therefore, data analysis basically involves summarising data. There are two ways of presenting data namely **descriptive statistics** and **inferential statistics**.

4.10.1 Descriptive statistics used

Descriptive statistics aims at describing data by investigating the distribution of scores on each variable. In other words, descriptive analysis allows the researcher to represent data in a manner that is easily interpretable (Dzansi, 2004: 197). Frequency distributions were used to summarise and describe the data obtained from the study (see Chapter 5 for details).

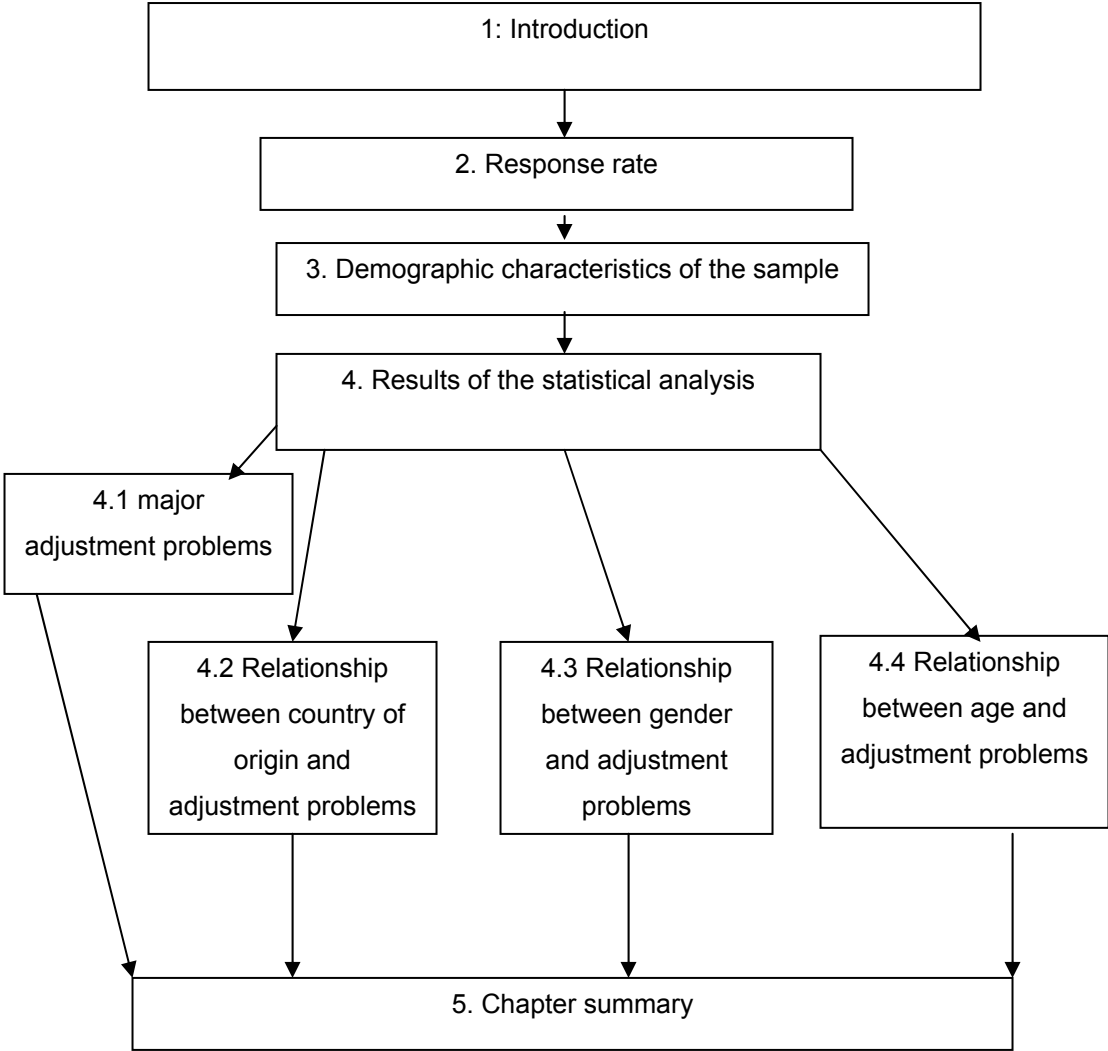
4.10.2 Inferential statistics used

No matter how useful descriptive analysis may be, the researcher's primary interest is more than mere description of samples. Researchers are actually interested in drawing conclusions about the population itself. Terre Blanche and Durrheim (2002: 117) tell us that inferential analysis allows the researcher to draw conclusions about the population based on data obtained from samples. The inferential statistics used was Chi square test (see Chapter 5 for details). The results are reported in Chapter 5.

4.11 SUMMARY AND CONCLUSIONS

This chapter has presented the methodology applied to the empirical study. A somewhat mixed-method approach (triangulation) was used in the data collection. Most of the analysis was however quantitative. A thorough discussion of ethical considerations and validity and reliability issues was undertaken. The next chapter presents the findings of the empirical study.

CHAPTER 5 OUTLINE



CHAPTER 5: RESULTS AND DISCUSSION

5.1 INTRODUCTION

The purpose of this study was to examine the nature of problems encountered by international students at CUT in the areas of social/personal, academic, emotional/personal, financial, housing/residence, food, health, immigration, and international student services. This chapter presents the results of the study based on the analysis of the data obtained from the returned questionnaires. The data were analysed according to three demographic variables: country/region of origin, gender, and age.

5.2 DEMOGRAPHICS

Part of this enquiry was to explore possible variations in student adjustment experiences. Certain demographic characteristics were used as explanatory variables for observed variations. Table 5.1 represents the summary of collected demographic variables.

According to type of residence, 72.5% of the respondents reside outside university premises while 27.5% reside on campus. In other words as many as 72.5% (66) reside in privately arranged accommodation while only 27.5% (25) had access to university provided accommodation.

In terms of country/geographical region of origin, students were classified into seven groups for the purpose of analysis. The largest group of students come from Lesotho (33% or 30), closely followed by Botswana (30.8% or 28), Namibia (9.9% or 9), Europe (8.8% or 8), Asia (7.7% or 7), other African countries excluding SADEC countries (5.5% or 5), and other SADEC countries excluding Lesotho, Namibia, and Botswana (4.4% or 4).

Table 5.1: Distribution of respondents according to certain demographics

Variable	Frequency	%	
Residence	Off campus	66	72.5
	On campus	25	27.5
	Total	91	100.0
Country/region of origin	Lesotho	30	33.0
	Namibia	9	9.9
	Botswana	28	30.8
	Other SADEC	4	4.4
	Other African	5	5.5
	Asia	7	7.7
	Europe	8	8.8
	Total	91	100.0
Gender	Male	44	48.4
	Female	47	51.6
	Total	91	100.0
Age	16-19 years	3	3.3
	20-25 years	52	57.1
	26-29 years	23	25.3
	30-35 years	11	12.1
	36-39 years	2	2.2
	Total	91	100
Marital status	Single	82	92.1
	Married	7	7.9
	Total	89*	100
Academic level	1 st year undergraduate	28	30.8
	2 nd year undergraduate	9	9.9
	3 rd year undergraduate	30	33.0
	B.Tech. Postgraduate	18	19.8
	M.Tech. Postgraduate	2	2.2
	Exchange student	4	4.4
	Total	91	100.0

* Two missing values

Gender distribution is fairly even. Males accounted for 48.4% (44) and females 51.6% (47) of the sample. In terms of age, 3.3% (3) were 19 years or below, the majority that is 57.1% (52) were between 20-25 years, 25.3% (23) were between 26-29 years, 12.1% (11) were between the ages 30-35 years, and 2.2% (2) were

between 36-39 years. 92.1% (82) of the respondents were married while 7.9% (7) of them were single. Two students did not respond to this question hence they were treated as missing values which did not count towards computations.

In terms of academic level, 30.8% (28) of the respondents were in their first year undergraduate studies, second year undergraduate students accounted for 9.9% (9), 33.0% (30) were third year undergraduate students, 2.2% (2) were masters level (postgraduate) students, and 4.4% (4) were exchange students from Germany who stay for one semester that is a maximum six months.

Table 5.2: Assessment of students' willingness to participate in future focus group discussion and their overall perception of usefulness of the survey.

Item	Completely disagree		Disagree		Agree		Completely agree	
	n	%	n	%	n	%	n	%
This procedure of helping identify problem areas is worthwhile	4	4.4%	5	5.5%	30	33.0%	52	57.1%
Totals	N = 9, % = 9.9				N = 82, % = 90.1			
Given the insight I have gained from participating in this survey, I will in future agree to participate in focus group discussion on adjustment problems	1	1.1%	4	4.4%	40	44.0%	46	50.5%
Totals	N = 5, % = 5.5				N = 86, % = 95.5			

Although this was not an objective of the study, two questions were posed with the primary aim of determining whether the insight gained from participation in the survey would change the international student' negative attitude towards focus group discussion on their adjustment problems. This exercise became necessary at the later stage of the study when as indicated in Chapter 4, students were found unwilling to take part in focus group discussion.

Table 5.2 shows that 90.1% of the respondents found the study a useful exercise and as high as 95.5% indicated willingness to participate in future focus group

discussions on the same topic. This finding is quite significant as it seems to suggest that the insight gained in the questionnaire survey positively influenced their attitude towards the focus group discussion. Secondly, since student response to the usefulness question shows a high satisfaction (90.1%), it is reasonable to conclude that their perception of the usefulness of participation influenced their decision to take part in future focus group discussion. These findings open up opportunities for future research (see chapter 6 for recommendations).

5.3 RESULTS AND DISCUSSION OF THE STATISTICAL ANALYSES

The descriptive statistics percentages (proportions), cross tabulations, and frequency tables were used to summarise and describe results.

Choosing an inferential statistics however was not so straightforward. Basically, there are two types of inferential statistics (parametric and non-parametric) and when to choose one over the other is a very contentious issue that cannot be adequately debated or discussed in a study of this nature. Suffice it to note that, like many of the so called “purists” Gay and Airasian (2003: 478) advice the use of the Chi-square test (a non-parametric statistic) as the appropriate test of significance when the data are in the form of frequency counts. As mentioned in the above paragraph, the data generated were in percentages and frequencies.

Also, Diamantopoulos and Schlegelmilch (2004: 27) argue that with a non-metric data (nominal and ordinal) only the less powerful non-parametric statistics can be used. The measuring instrument for this study was a 4-point ‘itemised rating scale’ that generated ordinal data.

Based on the above, it was decided that the non-parametric technique (the Chi-square test) was the most appropriate test of significance to use.

5.3.1 Major adjustment problems and their degree of difficulty

In order to answer to answer research question 1 and 2, percentage analysis of responses and rank ordering was carried out. Table 5.3 illustrates these data on the 62 problem items.

Table 5.3: Percentage analysis and rank order of problem items

PROBLEM	Problem area	minor		Moderate		major		Total %m	Rank order
		n	%	n	%	n	%		
Friendliness of Immigration officials	IMP	28	31.1%	32	35.6%	19	21.1%	87.8%	1
High cost of living in South Africa	FIP	14	15.4%	24	26.4%	39	42.9%	84.7%	2
Cost of food	FDP	21	23.1%	29	31.9%	26	28.6%	83.6%	3
Cost of health insurance	HLP	14	15.4%	25	27.5%	36	39.6%	82.5%	4
Getting visa extensions	IMP	15	16.5%	34	37.4%	25	27.5%	81.4%	5
Feel comfortable visiting immigration office	IMP	21	23.1%	31	34.1%	22	24.2%	81.4%	5
Work restrictions	IMP	14	15.4%	19	20.9%	40	44.0%	80.3%	7
Becoming a citizen of South Africa	IMP	9	9.9%	17	18.7%	47	51.6%	80.3%	7
Understanding immigration rules	IMP	16	17.6%	31	34.1%	24	26.4%	78.1%	9
Sufficiency of funds to meet expenses	FIP	19	20.9%	20	22.0%	29	31.9%	74.8%	10
Finding suitable student activities	SCP	26	28.6%	26	28.6%	14	15.4%	72.6%	11
Feeling homesick	EPP	26	28.6%	23	25.3%	16	17.6%	71.5%	12
Managing my finances	FIP	11	12.1%	32	35.2%	21	23.1%	70.4%	13
Access to medical services of choice	HLP	18	19.8%	11	12.1%	34	37.4%	69.3%	14
Adequacy of university health services	HLP	15	16.5%	22	24.2%	25	27.5%	68.2%	15
Availability of personal counselling services	HLP	31	34.1%	22	24.2%	9	9.9%	68.2%	16
Obtaining adequate health insurance	HLP	21	23.3%	14	15.6%	25	27.8%	66.7%	17
University accommodation	HRP	20	22.0%	15	16.5%	21	23.1%	61.6%	18
Helpfulness of international office staff	IOP	29	31.9%	15	16.5%	12	13.2%	61.6%	19
Unexpected financial needs	FIP	23	25.3%	11	12.1%	19	20.9%	58.3%	20
Adequacy of information at orientation	IOP	29	31.9%	16	17.6%	8	8.8%	58.3%	21
Interaction with South African people	SCP	28	30.8%	19	20.9%	5	5.5%	57.2%	22
Rooming with students of other nationalities	HRP	14	15.4%	15	16.5%	23	25.3%	57.2%	23
Availability of useful information	IOP	19	20.9%	15	16.5%	18	19.8%	57.2%	24
Coping with the volume of assignments	ACP	27	29.7%	14	15.4%	11	12.1%	57.2%	25
Coping with assessment methods	ACP	32	35.2%	14	15.4%	5	5.5%	56.1%	26
Grading system	ACP	20	22.0%	24	26.4%	7	7.7%	56.1%	27
knowing where to get financial assistance	FIP	19	20.9%	12	13.2%	20	22.0%	56.1%	28
Getting my native food	FDP	26	28.6%	13	14.3%	12	13.2%	56.1%	29
Sufficiency of orientation programme	IOP	28	30.8%	11	12.1%	12	13.2%	56.1%	30
Academic advising	ACP	29	32.2%	17	18.9%	4	4.4%	55.5%	31
Finding a place to live during college term	HRP	10	11.0%	21	23.1%	19	20.9%	55.0%	32
Getting sufficient exercise	HLP	16	17.6%	15	16.5%	19	20.9%	55.0%	33
Working in cooperation with RSA students	ACP	29	31.9%	14	15.4%	6	6.6%	53.9%	34

Experience of racial discrimination	SCP	22	24.2%	20	22.0%	6	6.6%	52.8%	35
Comprehending lectures	ACP	24	26.4%	18	19.8%	6	6.6%	52.8%	36
Finding suitable place to live during holidays	HRP	10	11.0%	9	9.9%	29	31.9%	52.8%	37
Experience loneliness	EPP	27	29.7%	13	14.3%	8	8.8%	52.8%	38
Dating	EPP	17	18.7%	12	13.2%	18	19.8%	51.7%	39
Friendliness of international office staff	IOP	24	26.4%	14	15.4%	9	9.9%	51.7%	40
Suffering from prejudice	SCP	23	25.3%	19	20.9%	4	4.4%	50.6%	41
Getting food of my choice	FDP	28	31.1%	9	10.0%	8	8.9%	50.0%	42
Experience of being called a foreigner	SCP	11	12.1%	17	18.7%	17	18.7%	49.5%	43
Time to rest	HLP	18	20.0%	13	14.4%	13	14.4%	48.8%	44
Opportunities for social interaction	SCP	24	26.4%	13	14.3%	7	7.7%	48.4%	45
Feeling of alienation (distant from others)	EPP	28	30.8%	11	12.1%	5	5.5%	48.4%	46
Obtaining assistance with registration	IOP	23	25.3%	13	14.3%	8	8.8%	48.4%	47
Feel a sense of helplessness	EPP	30	33.0%	7	7.7%	6	6.6%	47.3%	48
Getting courses I like	ACP	17	18.7%	13	14.3%	11	12.1%	45.1%	49
Getting sufficient personal help from my lecturers	ACP	19	20.9%	11	12.1%	10	11.0%	44.0%	50
Participation in class	ACP	24	26.7%	10	11.1%	5	5.6%	43.4%	51
Receiving money from home	FIP	13	14.4%	12	13.3%	13	14.4%	42.1%	52
Ease of making friends	SCP	21	23.1%	11	12.1%	6	6.6%	41.8%	53
Adapting to South African food	FDP	26	28.6%	11	12.1%	1	1.1%	41.8%	54
Library use	ACP	17	18.7%	7	7.7%	13	14.3%	40.7%	55
Taste of South African food	FDP	26	28.6%	8	8.8%	3	3.3%	40.7%	56
Adapting to South African climate	HLP	20	22.0%	11	12.1%	6	6.6%	40.7%	57
Finding worship place of my choice	SCP	19	20.9%	9	9.9%	7	7.7%	38.5%	58
Expressing yourself in English	ACP	22	24.2%	8	8.8%	2	2.2%	35.2%	59
Finding my way round campus	SCP	16	17.6%	13	14.3%	2	2.2%	34.1%	60
Distance from residence to class	HRP	17	18.7%	6	6.6%	7	7.7%	33.0%	61
Class attendance requirements	ACP	10	11.0%	5	5.5%	2	2.2%	18.7%	62
Total		1293	1424.0%	996	1096.8%	904	995.2%		
Average percentage			23.0		17.7		16.0	56.7%	

Table 5.3 shows that out of the 62 items, as many as 57 posed great difficulty to international students. In other words, majority of respondents perceive 57 out of 62 (that is 92% of the items) as major adjustment problems. Table 5.3 also shows the combined scores for the overall assessment of the adjustment experience to be 56.7% which is well over the 40% threshold (see Chapter 4 Section 4.9.5.1 for detailed discussion) set. This means that international students regard their experiences as problematic. This finding is significant for answering research question 2.

In terms of rank order, the ten most problematic items come from only four problem areas namely immigration problems (IMP) - 6 items; financial problems (FIP) – 2 items; food problems (FDP) – 1 item; and health problems (HLP) – 1 item. Table 5.4 shows the ten most problematic items.

Table 5.4: Frequency distribution and percentage analysis of 10 most difficult adjustment problem items of respondents in rank order.

Problem	Problem area	minor		Moderate		major		Total	Total	Rank order
		n	%	n	%	n	%	%m	n	
Friendliness of Immigration officials	IMP	28	31.1%	32	35.6%	19	21.1%	87.8%	79	1
High cost of living in South Africa	FIP	14	15.4%	24	26.4%	39	42.9%	84.7%	77	2
Cost of food	FDP	21	23.1%	29	31.9%	26	28.6%	83.6%	76	3
Cost of health insurance	HLP	14	15.4%	25	27.5%	36	39.6%	82.5%	75	4
Getting visa extensions	IMP	15	16.5%	34	37.4%	25	27.5%	81.4%	74	5
Feel comfortable visiting immigration office	IMP	21	23.1%	31	34.1%	22	24.2%	81.4%	74	5
Work restrictions	IMP	14	15.4%	19	20.9%	40	44.0%	80.3%	73	7
Becoming a citizen of South Africa	IMP	9	9.9%	17	18.7%	47	51.6%	80.3%	73	8
Understanding immigration rules	IMP	16	17.6%	31	34.1%	24	26.4%	78.1%	71	8
Sufficiency of funds to meet expenses	FIP	19	20.9%	20	22.0%	29	31.9%	74.8%	68	10

Out of the ten most difficult problems, six items from the immigration problem area (IMP) were reported to be of great difficulty. Friendliness of Immigration officials (n = 79; % = 87.8) had the overall highest percentage.

5.3.2 Differences in problems based on country/region of origin.

In order to answer the research question: *are there any significant differences in adjustment problems based on country of origin?* the null hypothesis H_0 : *perceived adjustment problems facing international students studying at CUT do not differ significantly based on country of origin* had to be tested. The non-parametric statistic - Chi-square test was chosen as the test of significance (see Section 5.4 for reasons). The following sections present the results and discussions of the tests of significance on the nine problem areas.

5.3.2.1 Differences in socio/cultural problems by country/region of origin

Table 5.5 indicates that responses to questions regarding suffering from prejudice and ease of making friends with South African students; vary significantly at the 0.05 level of significance according to country/region of origin.

Table 5.5: Pearson Chi-Square test for socio/cultural problems country/region of origin.

Question	df	Chi-square	significance
Q7 Respondent suffering from prejudice	18	30.451	.033*
Q8 Respondent's experience of racial discrimination	18	25.815	.104
Q9 Ease of making friends with South African Students	18	39.080	.003*
Q10 Interaction with South African people	18	16.807	.536
Q11 Finding suitable student activities	18	15.058	.658
Q12 Finding my way round campus	18	19.402	.367
Q13 Opportunities for social interaction with South African students	18	11.539	.870
Q14 Experience of being called a foreigner	18	28.812	.051
Q15 Finding worship place of my choice	18	16.175	.580

* The Chi-square statistic is significant at the 0.05 level.

Using cross tabulation, observed differences were investigated further. The results are reported in Table 5.6 and 5.7

Table 5.6 shows that majority of respondents from Lesotho (70%), Asia (71.4%) reported that they have not suffered from prejudice. On the other hand respondents from other African countries (80%) and Europe (62.5%) reported having been subjected to minor prejudice. This observed difference somewhat corresponds to what has often been reported in the national press about the relatively higher levels of prejudice suffered by immigrants from other African countries compared to Asian.

Table 5.6: Cross-tab to investigate differences in suffering from prejudice by country/region of origin

	Degree of severity of problem	Respondent's country/region of origin						Total		
		Lesotho	Namibia	Botswana	Other SADEC	Other African	Asia		Europe	
Respondents suffering from prejudice	none	21	4	9	2	1	5	3	45	
		70.0%	44.4%	32.1%	50.0%	20.0%	71.4%	37.5%	49.5%	
	minor	3	3	6	1	4	1	5	23	
		10.0%	33.3%	21.4%	25.0%	80.0%	14.3%	62.5%	25.3%	
	moderate	4	2	11	1	0	1	0	19	
		13.3%	22.2%	39.3%	25.0%	.0%	14.3%	.0%	20.9%	
	major	2	0	2	0	0	0	0	4	
		6.7%	.0%	7.1%	.0%	.0%	.0%	.0%	4.4%	
	Total		30	9	28	4	5	7	8	91
			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

It also confirms the high levels of xenophobia directed at students from other African countries as reported by Shindondola (2002). Contrary to what has been widely reported in the national press, a very high percentage of Europeans (62.5%) reported problems with prejudice. It is baffling that respondents from Namibia and Botswana who are close neighbours of South Africans and who bear close similarities with South Africans should experience any form of prejudice at all.

Table 5.7 shows that overall; respondents did not regard making friends with South African students as a major problem. However, the table reveals that while majority of the neighbouring countries (Lesotho (76.7%); Botswana (67.9%); and Namibia (55.6%) experienced no problems in making friends with South African students, majority of the students from other SADEC countries (75%); other African countries (60%); Asia (57%); and Europe (50%) experienced minor problems. This difference is understandable since Lesotho, Botswana, and Namibia being cross-boarder neighbours would naturally share many similarities

with South Africans hence interaction with South Africans should be easier than from distant places.

Table 5.7: Cross-tab for differences in ease of making friends with South African students by country/region of origin

Ease of making friends with South African Students	Degree of severity of problem	Country/region of origin						Total	
		Lesotho	Namibia	Botswana	Other SADEC	Other African	Asia		Europe
none		23	5	19	1	1	2	2	53
		76.7%	55.6%	67.9%	25.0%	20.0%	28.6%	25.0%	58.2%
minor		4	1	2	3	3	4	4	21
		13.3%	11.1%	7.1%	75.0%	60.0%	57.1%	50.0%	23.1%
moderate		0	3	6	0	1	0	1	11
		.0%	33.3%	21.4%	.0%	20.0%	.0%	12.5%	12.1%
major		3	0	1	0	0	1	1	6
		10.0%	.0%	3.6%	.0%	.0%	14.3%	12.5%	6.6%
Total		30	9	28	4	5	7	8	91
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

5.3.2.2 Differences in academic problems based on country/region of origin

Table 5.8 indicates that one item in the factor **academic problems** (expressing yourself in English) varies significantly according to country/region of origin.

Using cross tabulation, observed differences were investigated further. The results are reported in Table 5.9

Table 5.8: Pearson Chi-Square test for academic problems by country/region of origin.

Academic problems		Respondent's country/region of origin
Q16 Getting sufficient personal help from my lecturers	Chi-square	23.686
	df	18
	Sig.	.166
Q17 Coping with the volume of assignments	Chi-square	18.037
	df	18
	Sig.	.453
Q18 Coping with assessment methods	Chi-square	19.209
	df	18
	Sig.	.379
Q19 Participation in class	Chi-square	18.942
	df	18
	Sig.	.395
Q20 Expressing yourself in English	Chi-square	44.113
	df	18
	Sig.	.001*
Q21 Working in cooperation with South African students	Chi-square	16.750
	df	18
	Sig.	.540
Q22 Academic advising	Chi-square	19.345
	df	18
	Sig.	.371
Q23 Grading system	Chi-square	18.241
	df	18
	Sig.	.440(a,b)
Q24 Comprehending lectures	Chi-square	8.247
	df	18
	Sig.	.975
Q25 Getting courses I like	Chi-square	24.740
	df	18
	Sig.	.132
Q26 Class attendance requirements	Chi-square	17.104
	df	18
	Sig.	.516
Q27 Library use	Chi-square	27.706
	df	18
	Sig.	.067

Table 5.9: Cross-tab to investigate differences in expressing oneself in English by country/region of origin.

Q20 Expressing yourself in English	severity		Q2 Respondent's country/region of origin						Total
			Lesotho	Namibia	Botswana	Other SADEC	Other African	Asia	
	none	N	28	7	15	3	2	1	3
%		93.3%	77.8%	53.6%	75.0%	40.0%	14.3%	37.5%	64.8%
minor	N	0	2	7	1	2	6	4	22
	%	.0%	22.2%	25.0%	25.0%	40.0%	85.7%	50.0%	24.2%
moderate	N	0	0	6	0	1	0	1	8
	%	.0%	.0%	21.4%	.0%	20.0%	.0%	12.5%	8.8%
major	N	2	0	0	0	0	0	0	2
	%	6.7%	.0%	.0%	.0%	.0%	.0%	.0%	2.2%
Total	N	30	9	28	4	5	7	8	91
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

According to Table 5.9, majority of the international students who come from African countries (Lesotho, 93.3%; Namibia, 77.8%; Botswana, 53.6%; other SADEC countries, 75%) experienced no problems with expressing themselves in English. The majority (85.7%) of the Asian students and the majority (50%) of European students experienced minor problems. These differences are somewhat expected given that the medium of instruction in Lesotho, Namibia, Botswana, and most of the other SADEC countries is English. Similarly the higher degree of difficulty experienced by the Asians and the Europeans is expected. The Asians are mostly Chinese while the Europeans are all German exchange students all of whom do not have English as their mother tongue nor as the medium of instruction in their respective countries.

5.3.2.3 Differences in emotional/personal problems according to country/region of origin

Table 5.10 shows significant differences for *loneliness* and *homesickness* based on country/region of origin. These differences were further examined in Tables 5.11 and 5.12 respectively.

Table 5.10: Pearson Chi-Square Tests for to investigate differences in emotional/personal problems by country/region of origin

Emotional problems		Q2 Respondent's country/region of origin
Q28 Feel a sense of helplessness	Chi-square	13.354
	df	18
	Sig.	.770
Q29 Feeling of alienation (distant from others)	Chi-square	24.800
	df	18
	Sig.	.131
Q30 Experience loneliness	Chi-square	29.172
	df	18
	Sig.	.046*
Q31 Feeling homesick	Chi-square	28.893
	df	18
	Sig.	.050*
Q32 Dating	Chi-square	24.511
	df	18
	Sig.	.139

* The Chi-square statistic is significant at the 0.05 level.

According to table 5.11, international students from other SADEC countries (50%), other African countries (40%), Asia (57.1%) and Europe (50%) reported higher percentages of minor problems with loneliness as opposed to the lower percentages reported for students from Lesotho (20%), Namibia (22%), and Botswana (25%). The same trend is somewhat evident for moderate and major problems (see Table 5.11). This seems to suggest that distance from home country is related to a students feeling of loneliness.

Table 5.11: Cross-tab to investigate differences in experience of loneliness by country/region of origin

Q30 Experience loneliness	Degree of severity		Q2 Respondent's country/region of origin						Total
			Lesotho	Namibia	Botswana	Other SADEC	Other African	Asia	
	none	N	19	4	13	1	0	2	4
%		63.3%	44.4%	46.4%	25.0%	.0%	28.6%	50.0%	47.3%
minor	N	6	2	7	2	2	4	4	27
	%	20.0%	22.2%	25.0%	50.0%	40.0%	57.1%	50.0%	29.7%
moderate	N	3	0	5	1	3	1	0	13
	%	10.0%	.0%	17.9%	25.0%	60.0%	14.3%	.0%	14.3%
major	N	2	3	3	0	0	0	0	8
	%	6.7%	33.3%	10.7%	.0%	.0%	.0%	.0%	8.8%
Total	N	30	9	28	4	5	7	8	91
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 5.12: Cross-tab of differences in feeling homesick by country/region of origin.

Q31 Feeling homesick	Degree of severity		Q2 Respondent's country/region of origin						Total
			Lesotho	Namibia	Botswana	Other SADEC	Other African	Asia	
	none	N	11	2	4	2	1	1	5
%		36.7%	22.2%	14.3%	50.0%	20.0%	14.3%	62.5%	28.6%
minor	N	9	0	8	1	1	5	2	26
	%	30.0%	.0%	28.6%	25.0%	20.0%	71.4%	25.0%	28.6%
moderate	N	5	3	12	1	1	1	0	23
	%	16.7%	33.3%	42.9%	25.0%	20.0%	14.3%	.0%	25.3%
major	N	5	4	4	0	2	0	1	16
	%	16.7%	44.4%	14.3%	.0%	40.0%	.0%	12.5%	17.6%
Total	N	30	9	28	4	5	7	8	91
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

In Table 5.12, the highest percentages of respondents from (Lesotho, 36.7%; other SADEC, 50%; and Europe, 62.5%) had no problems with homesickness; the majority of respondents from Asia (71.4%) had minor problems; the highest percentage of respondents from Botswana (42.9%) had moderate problems; and the highest percentage of respondents from Namibia (44.4%) and Other African countries (40%) had major problems with homesickness.

5.3.2.4 Differences in financial problems by country/region of origin

Table 5.13 shows that the item, *high cost of living in South Africa* is significantly influenced by country/region of origin. This difference is explored in Table 5.14

Table 5.13: Pearson Chi-Square Tests for differences in financial problems by country/region of origin.

Financial problems		Q2 Respondent's country/region of origin
Q33 Sufficiency of funds to support meet expenses	Chi-square	26.081
	df	18
	Sig.	.098
Q34 Receiving money from home	Chi-square	22.154
	df	18
	Sig.	.225
Q35 Unexpected financial needs	Chi-square	25.765
	df	18
	Sig.	.105
Q36 knowing where to get financial assistance	Chi-square	19.266
	df	18
	Sig.	.376
Q37 Managing my finances	Chi-square	22.627
	df	18
	Sig.	.205
Q38 High cost of living in South Africa	Chi-square	44.546
	df	18
	Sig.	.000*

* The Chi-square statistic is significant at the 0.05 level.

Table 5.14 reveals that the highest percentage of respondents from Lesotho (43.3%); Namibia (55.6%); and Botswana (60.7%) rated *cost of living in South Africa* as a major problem. The highest percentage of respondents from other African countries (60%) perceive it as a moderate problem; Asian students (57.1%) and European students (50%) see it as a minor problem while highest percentage of respondents from other SADEC countries (50%) saw no problems with the *cost of living in South Africa*. It is difficult to comment on these variations except to suggest that their perceptions might have been influenced by the cost of living in their home countries.

Table 5.14: Cross-tab for differences in high cost of living by country/region of origin

High cost of living in South Africa	Degree of severity		Q2 Respondent's country/region of origin						Total
			Lesotho	Namibia	Botswana	Other SADEC	Other African	Asia	
	none	n	7	0	1	2	0	1	3
%		23.3%	.0%	3.6%	50.0%	.0%	14.3%	37.5%	15.4%
minor	n	4	0	1	1	0	4	4	14
	%	13.3%	.0%	3.6%	25.0%	.0%	57.1%	50.0%	15.4%
moderate	n	6	4	9	1	3	1	0	24
	%	20.0%	44.4%	32.1%	25.0%	60.0%	14.3%	.0%	26.4%
major	n	13	5	17	0	2	1	1	39
	%	43.3%	55.6%	60.7%	.0%	40.0%	14.3%	12.5%	42.9%
Total	n	30	9	28	4	5	7	8	91
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

5.3.2.5 Differences in housing/residence problems according to country/region of origin

Table 5.15 shows that housing problems faced by international students do not vary significantly at the 0.05 level based on country/region of origin.

Table 5.15: Pearson Chi-Square Tests for differences in housing problems by country/region of origin.

Housing problems	Q2 Respondent's country/region of origin	
Q39 Finding a place to live during college term	Chi-square	28.603
	df	18
	Sig.	.053
Q40 Finding suitable place to live during holidays	Chi-square	15.661
	df	18
	Sig.	.616
Q41 Rooming with students of other nationalities	Chi-square	19.566
	df	18
	Sig.	.358
Q42 University accommodation	Chi-square	18.287
	df	18
	Sig.	.437
Q43 Distance from residence to class	Chi-square	19.178
	df	18
	Sig.	.381

5.3.2.6 Differences in food problems according to country/region of origin

Four of the five items constituting the factor *food problems*, differ according to country/region of origin. Table 5.16 indicates that taste of South African food; cost of food; adapting to South African food; and getting native one's native food differ significantly according to country/region of origin. These differences were further analysed and the results shown in Tables 5.17, 5.18, 5.19, and 5.20.

Table 5.16: Pearson Chi-Square tests for differences in food problems by country/region of origin.

Food problems		Q2 Respondent's country/region of origin
Q44 Taste of South African food	Chi-square	62.046
	df	18
	Sig.	.000*
Q45 Cost of food	Chi-square	30.628
	df	18
	Sig.	.032*
Q46 Getting food of my choice	Chi-square	25.187
	df	18
	Sig.	.120
Q47 Adapting to South African food	Chi-square	33.412
	df	18
	Sig.	.015*
Q48 Getting my native food	Chi-square	45.659
	df	18
	Sig.	.000*

* The Chi-square statistic is significant at the 0.05 level.

Table 5.17 indicates that the majority of respondents from Lesotho (83.8%), Namibia (77.8%), Botswana (67.9%), and other SADEC countries (50%) did not experience any problems with the taste of South African food. This finding is consistent with expectations because these countries are regional neighbours of South Africa who should be used to the same kind(s) of food. Majority of respondents from other African countries (100%) and Europe (75%) reported minor problems. The majority of respondents from Asia reported moderate problems. That the Asians reported a higher degree of problems than the

Africans is as expected because cultural differences between the two continents are obvious and quite different hence differences in preferences for food should be expected.

Table 5.17: Cross-tab to investigate differences in taste of South African food by country/region of origin

	Degree of severity		Q2 Respondent's country/region of origin						Total	
			Lesotho	Namibia	Botswana	Other SADEC	Other African	Asia		Europe
Q44 Taste of South African food	none	n	25	7	19	2	0	1	0	54
		%	83.3%	77.8%	67.9%	50.0%	.0%	14.3%	.0%	59.3%
	minor	n	3	2	7	1	5	2	6	26
		%	10.0%	22.2%	25.0%	25.0%	100.0%	28.6%	75.0%	28.6%
	moderate	n	1	0	0	1	0	4	2	8
		%	3.3%	.0%	.0%	25.0%	.0%	57.1%	25.0%	8.8%
	major	n	1	0	2	0	0	0	0	3
		%	3.3%	.0%	7.1%	.0%	.0%	.0%	.0%	3.3%
	Total	n	30	9	28	4	5	7	8	91
		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Differences in cost of food are difficult to explain as there are no clear patterns. In terms of cost of South African food, Table 5.18 reveals the following: the highest percentage of respondents from other SADEC countries (50%) and Europe (62.5%) had minor problems with the cost of food in South Africa; the highest percentages of respondents from Lesotho (30), Namibia (66.7%) and other African countries (60%) encountered moderate problems; while the highest percentages of respondents from Botswana (46.4%) and Asia (42.9%) reported major problems. It therefore appears that cost of food is problematic for international students.

Table 5.18: Cross-tab for differences in perception of cost of food according to country/region of origin.

Q45 Cost of food	Degree of severity		Q2 Respondent's country/region of origin						Total
			Lesotho	Namibia	Botswana	Other SADEC	Other African	Asia	
	none	n	8	0	2	1	0	2	2
%		26.7%	.0%	7.1%	25.0%	.0%	28.6%	25.0%	16.5%
minor	n	7	0	5	2	1	1	5	21
	%	23.3%	.0%	17.9%	50.0%	20.0%	14.3%	62.5%	23.1%
moderate	n	9	6	8	1	3	1	1	29
	%	30.0%	66.7%	28.6%	25.0%	60.0%	14.3%	12.5%	31.9%
major	n	6	3	13	0	1	3	0	26
	%	20.0%	33.3%	46.4%	.0%	20.0%	42.9%	.0%	28.6%
Total	n	30	9	28	4	5	7	8	91
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 5.19: Cross-tab to investigate differences in adaptation to South African food according to country/region of origin

Q47 Adapting to South African food	Degree of severity		Q2 Respondent's country/region of origin						Total
			Lesotho	Namibia	Botswana	Other SADEC	Other African	Asia	
	none	n	26	4	18	2	0	1	2
%		86.7%	44.4%	64.3%	50.0%	.0%	14.3%	25.0%	58.2%
minor	n	2	4	8	1	3	4	4	26
	%	6.7%	44.4%	28.6%	25.0%	60.0%	57.1%	50.0%	28.6%
moderate	n	2	1	1	1	2	2	2	11
	%	6.7%	11.1%	3.6%	25.0%	40.0%	28.6%	25.0%	12.1%
major	n	0	0	1	0	0	0	0	1
	%	.0%	.0%	3.6%	.0%	.0%	.0%	.0%	1.1%
Total	n	30	9	28	4	5	7	8	91
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

According to Table 5.19, majority of the respondents from Lesotho (86.7%), Namibia (44.4%), Botswana (64.3%), and other SADEC countries (50%) reported having no problems in adapting to South African food. On the other hand,

majority of the respondents from the remaining countries/regions, other African countries (60%), Asia (57.1%) and Europe (50%) reported having minor problems in adapting. This finding is consistent with expectations. Lesotho, Namibia, Botswana, and other SADEC countries, are immediate neighbours of South Africa. They should therefore have lesser problem with adjusting to South African food than students from other African countries, Asia, and Europe.

Table 5.20 indicates that the majority of respondents from Lesotho (80%), Namibia (33.3%), Botswana (32.1%), and other SADEC countries (50%) perceive getting native food a no problem. On the other hand, majority of the respondents from other African countries (80%), and Europe (75%) encountered minor problems in getting their native food.

Table 5.20: Cross-tab to investigate differences in getting native food by country/region of origin.

	Degree of severity		Q2 Respondent's country/region of origin						Total	
			Lesotho	Namibia	Botswana	Other SADEC	Other African	Asia		Europe
Q48 Getting my native food	none	n	24	3	9	2	0	2	0	40
		%	80.0%	33.3%	32.1%	50.0%	.0%	28.6%	.0%	44.0%
	minor	n	5	2	6	1	4	2	6	26
		%	16.7%	22.2%	21.4%	25.0%	80.0%	28.6%	75.0%	28.6%
	moderate	n	0	2	8	0	0	1	2	13
		%	.0%	22.2%	28.6%	.0%	.0%	14.3%	25.0%	14.3%
	major	n	1	2	5	1	1	2	0	12
		%	3.3%	22.2%	17.9%	25.0%	20.0%	28.6%	.0%	13.2%
	Total	n	30	9	28	4	5	7	8	91
		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

5.3.2.7 Differences in health problems by country/region of origin

Table 5.21 indicates significant differences for two items in the health problem area namely *cost of health insurance* and *adequacy of university health services* based on country/region of origin.

Table 5.21: Pearson Chi-Square Tests for differences in health problems by country/region of origin.

Health problems		Q2 Respondent's country/region of origin
Q49 Cost of health insurance	Chi-square	29.407
	df	18
	Sig.	.0448
Q50 Obtaining adequate health insurance	Chi-square	16.427
	df	18
	Sig.	.563
Q51 Access to medical services of choice	Chi-square	21.306
	df	18
	Sig.	.264
Q52 Adequacy of university health services	Chi-square	30.171
	df	18
	Sig.	.036*
Q53 Getting sufficient exercise	Chi-square	20.955
	df	18
	Sig.	.282
Q54 Adapting to South African climate	Chi-square	16.967
	df	18
	Sig.	.525
Q55 Time to rest	Chi-square	13.693
	df	18
	Sig.	.749
Q56 Availability of personal counselling services	Chi-square	23.836
	df	18
	Sig.	.160

* The Chi-square statistic is significant at the 0.05 level.

Table 5.22 indicates that the majority of respondents from Namibia (62.5%) and Botswana (28.6%) had major problems in obtaining adequate health insurance. At the same time, the majority of respondents from other SADEC countries (50%) had minor problems; while majority of the respondents from Lesotho (33.3%), other African countries (60%), Asia (42.9%), and Europe (62.5%) did not experience any problems. The reasons for these differences are difficult to explain.

Table 5.22: Cross-tab for differences in obtaining adequate health insurance by country/region of origin

Q50 Obtaining adequate health insurance	severity		Q2 Respondent's country/region of origin						Total	
			Lesotho	Namibia	Botswana	Other SADEC	Other African	Asia		Europe
none	n		10	1	7	1	3	3	5	30
	%		33.3%	12.5%	25.0%	25.0%	60.0%	42.9%	62.5%	33.3%
minor	n		6	2	8	2	0	1	2	21
	%		20.0%	25.0%	28.6%	50.0%	.0%	14.3%	25.0%	23.3%
moderate	n		6	0	5	0	1	1	1	14
	%		20.0%	.0%	17.9%	.0%	20.0%	14.3%	12.5%	15.6%
major	n		8	5	8	1	1	2	0	25
	%		26.7%	62.5%	28.6%	25.0%	20.0%	28.6%	.0%	27.8%
Total	n		30	8	28	4	5	7	8	90
	%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

According to Table 5.23, the majority of respondents from Lesotho (33.3%), other SADEC countries (50%), other African countries (60%), and Europe (62.5%) did not experience any problems with the adequacy of university health services. On the other hand, the majority of respondents from Namibia (66.7%), Botswana (35.7%), and Asia (42.9%) regard university health services as a major problem. This means that while some student sections regarded the adequacy of university health services as no problem, others perceived it as a major problem.

Table 5.23: Cross-tab to investigate differences in adequacy of university health services according to country/region of origin

Q52 Adequacy of university health services	Severity		Q2 Respondent's country/region of origin						Total
			Lesotho	Namibia	Botswana	Other SADEC	Other African	Asia	
	no	n	10	0	7	2	3	2	5
%		33.3%	.0%	25.0%	50.0%	60.0%	28.6%	62.5%	31.9%
minor	n	7	3	1	1	1	0	2	15
	%	23.3%	33.3%	3.6%	25.0%	20.0%	.0%	25.0%	16.5%
moderate	n	7	0	10	1	1	2	1	22
	%	23.3%	.0%	35.7%	25.0%	20.0%	28.6%	12.5%	24.2%
major	n	6	6	10	0	0	3	0	25
	%	20.0%	66.7%	35.7%	.0%	.0%	42.9%	.0%	27.5%
Total	n	30	9	28	4	5	7	8	91
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

5.3.2.8 Differences in immigration problems by country/region of origin

Table 5.24: Pearson Chi-Square Tests for differences in immigration problems by country/region of origin.

Immigration problems		Q2 Respondent's country/region of origin
Q57 Friendliness of Immigration officials	Chi-square	22.559
	df	18
	Sig.	.208
Q58 Getting visa extensions	Chi-square	21.228
	df	18
	Sig.	.268
Q59 Feel comfortable visiting immigration office	Chi-square	24.682
	df	18
	Sig.	.134
Q60 Understanding immigration rules	Chi-square	22.455
	df	18
	Sig.	.212
Q61 Work restrictions	Chi-square	12.516
	df	18
	Sig.	.819
Q62 Becoming a citizen of South Africa	Chi-square	16.042
	df	18
	Sig.	.590

Table 5.24 shows that there are no significant differences in the immigration problem area based on country/region of origin.

5.3.2.9 Differences in international student advisory service by country/region of origin

Table 5.25 indicates significant differences for two items in international student advisory problem area namely *adequacy of information at orientation* and *obtaining assistance with registration* based on country/region of origin.

Table 5.25: Pearson Chi-Square Tests for differences in student advisory service problems by country/region of origin.

International student advisory service problems	Q2 Respondent's region of origin	
Q63 Availability of useful information	Chi-square	27.228
	df	18
	Sig.	.075
Q64 Helpfulness of international office staff	Chi-square	13.342
	df	18
	Sig.	.771
Q65 Friendliness of international office staff	Chi-square	24.273
	df	18
	Sig.	.146
Q66 Adequacy of information at orientation	Chi-square	34.144
	df	18
	Sig.	.012*
Q67 Obtaining assistance with registration	Chi-square	34.734
	df	18
	Sig.	.010*
Q68 Sufficiency of orientation programme	Chi-square	20.753
	df	18
	Sig.	.292

* The Chi-square statistic is significant at the 0.05 level.

Perceptions about the adequacy of information at orientation ranged between no problem, minor problem and major problem based on country /region of origin of the respondents. According to Table 5.26, the majority of respondents from Lesotho (50%), Botswana (39.3%), other SADEC countries (50%), other African countries (40%), and Asia (57.1%), rated the *adequacy of information at*

orientation as a *no problem*. On the other hand, 75% of the respondents from Europe rated it as a minor problem, while the majority of respondents from Namibia 44.4% had major problems with the same item.

Table 5.26: Cross-tab to investigate differences in adequacy of information at orientation according to country/region of origin

Adequacy of information at orientation	Severity		Q2 Respondent's country/region of origin						Total
			Lesotho	Namibia	Botswana	Other SADEC	Other African	Asia	
none	N	15	2	11	2	2	4	2	38
	%	50.0%	22.2%	39.3%	50.0%	40.0%	57.1%	25.0%	41.8%
minor	N	9	2	5	2	2	3	6	29
	%	30.0%	22.2%	17.9%	50.0%	40.0%	42.9%	75.0%	31.9%
moderate	N	6	1	8	0	1	0	0	16
	%	20.0%	11.1%	28.6%	.0%	20.0%	.0%	.0%	17.6%
major	N	0	4	4	0	0	0	0	8
	%	.0%	44.4%	14.3%	.0%	.0%	.0%	.0%	8.8%
Total	N	30	9	28	4	5	7	8	91
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Except for the majority of respondents from Namibia (55.6%) who reported major problems for the item *obtaining assistance with registration*, high percentages of respondents from all the other countries/regions said they had no problems with it. According to Table 5.27, significantly high percentages of respondents from Lesotho (46.7%), Botswana (46.4%), other SADEC countries (75%), other African countries (80%), Asia (57.1%), and Europe (75%) experienced no problems in getting adequate assistance with registration.

Table 5.27: Cross-tab to investigate differences in level of difficulty of obtaining assistance with registration based on country/region of origin

Q67 Obtaining assistance with registration	Severity		Q2 Respondent's region of origin						Total	
			Lesotho	Namibia	Botswana	Other SADEC	Other African	Asia		Europe
none	N		14	3	13	3	4	4	6	47
	%		46.7%	33.3%	46.4%	75.0%	80.0%	57.1%	75.0%	51.6%
minor	N		8	1	9	1	1	2	1	23
	%		26.7%	11.1%	32.1%	25.0%	20.0%	28.6%	12.5%	25.3%
moderate	N		7	0	4	0	0	1	1	13
	%		23.3%	.0%	14.3%	.0%	.0%	14.3%	12.5%	14.3%
major	N		1	5	2	0	0	0	0	8
	%		3.3%	55.6%	7.1%	.0%	.0%	.0%	.0%	8.8%
Total	N		30	9	28	4	5	7	8	91
	%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

5.3.3 Differences in adjustment problems according to gender

The following sections present the results and discussions of the tests of significance on the nine problem areas based on the gender of respondents.

5.3.3.1 Differences in socio/cultural problems according to gender

In order to answer the research question: *are there any significant differences in adjustment problems based on gender?* The null hypothesis H_3 : *perceived adjustment problems facing international students studying at CUT do not differ significantly based on gender* had to be tested. Chi-square tests were performed using *gender* as the explanatory variable. The following tables show the results of these analyses.

According to Table 5.28, items in the factor socio/cultural problems are not gender sensitive. Therefore, no further investigation was done.

Table 5.28: Pearson Chi-Square test for socio/cultural problems according to gender

Socio/cultural problems	Q3 Respondent's gender	
Q7 Respondent suffering from prejudice	Chi-square	2.510
	df	3
	Sig.	.474
Q8 Respondent's experience of racial discrimination	Chi-square	1.909
	df	3
	Sig.	.591
Q9 Ease of making friends with South African Students	Chi-square	4.326
	df	3
	Sig.	.228
Q10 Interaction with South African people	Chi-square	1.789
	df	3
	Sig.	.617
Q11 Finding suitable student activities	Chi-square	.711
	df	3
	Sig.	.871
Q12 Finding my way round campus	Chi-square	1.195
	df	3
	Sig.	.754
Q13 Opportunities for social interaction with South African students	Chi-square	1.096
	df	3
	Sig.	.778
Q14 Experience of being called a foreigner	Chi-square	3.794
	df	3
	Sig.	.285
Q15 Finding worship place of my choice	Chi-square	1.591
	df	3
	Sig.	.661

5.3.3.2 Differences in academic problems according to gender

Gender seems to have an impact on academic problems as two items namely; participation in class and library use, differ significantly in terms of gender (see Table 5.29). These differences are explored further in Tables 5.30 and 5.31

Table 5.29: Pearson Chi-Square Tests for differences in academic problems based on gender

Academic problems	Respondent's gender	
Q16 Getting sufficient personal help from my lecturers	Chi-square	2.528
	df	3
	Sig.	.470
Q17 Coping with the volume of assignments	Chi-square	7.203
	df	3
	Sig.	.066
Q18 Coping with assessment methods	Chi-square	.788
	df	3
	Sig.	.852
Q19 Participation in class	Chi-square	8.887
	df	3
	Sig.	.031*
Q20 Expressing yourself in English	Chi-square	5.185
	df	3
	Sig.	.159
Q21 Working in cooperation with South African students	Chi-square	3.845
	df	3
	Sig.	.279
Q22 Academic advising	Chi-square	4.218
	df	3
	Sig.	.239
Q23 Grading system	Chi-square	3.557
	df	3
	Sig.	.313
Q24 Comprehending lectures	Chi-square	7.271
	df	3
	Sig.	.064
Q25 Getting courses I like	Chi-square	3.257
	df	3
	Sig.	.354
Q26 Class attendance requirements	Chi-square	7.060
	df	3
	Sig.	.070
Q27 Library use	Chi-square	12.880
	df	3
	Sig.	.005*

* The Chi-square statistic is significant at the 0.05 level.

While differences are apparent in Table 5.30, the direction is not easy to identify as the differences do not show any pattern. For example, a relatively higher percentage of female students (63%) reported no problems with participation in class as opposed to males (50%). On the other hand a higher percentage of males (38.6%) reported minor problems than the 15.2%) for females. Also a higher percentage of females (17.4%) reported moderate problems as opposed to the 4.5% moderate problems reported by the male students.

Table 5.30: Cross-tab for differences in participation in class according to gender

Problem	Severity		Q3 Respondent's gender		Total
			Male	Female	
Q19 Participation in class	none	N	22	29	51
		%	50.0%	63.0%	56.7%
	minor	N	17	7	24
		%	38.6%	15.2%	26.7%
	moderate	N	2	8	10
		%	4.5%	17.4%	11.1%
	major	N	3	2	5
		%	6.8%	4.3%	5.6%
Total	N	44	46	90	
	%	100.0%	100.0%	100.0%	

Table 5.31: Cross-tab for differences in library use according to gender

	Severity		Q3 Respondent's gender		Total
			Male	Female	
Q27 Library use	none	N	18	36	54
		%	40.9%	76.6%	59.3%
	minor	N	11	6	17
		%	25.0%	12.8%	18.7%
	moderate	N	6	1	7
		%	13.6%	2.1%	7.7%
	major	N	9	4	13
		%	20.5%	8.5%	14.3%
Total	N	44	47	91	
	%	100.0%	100.0%	100.0%	

Similarly, no patterns are identifiable for differences in library use according to gender (see Table 5.31). A higher percentage (76.6%0 of females had no problems with library use as opposed to the (40.9%) for males. However males reported higher percentages for minor problems – 25%; moderate problems – 13.6%; and major problems – 20.5% as opposed to those reported for female students who reported 12.8% minor problems; 2.1% moderate problems and 8.5% major problems.

5.3.3.3 Differences in emotional/personal problems based on gender

Table 5.32 shows that gender does not have an impact on emotional/personal problems of international students at CUT as no significant differences were observed.

Table 5.32: Pearson Chi-Square Tests for differences in emotional/personal problems according to gender

Emotional problems		Q3 Respondent's gender
Q28 Feel a sense of helplessness	Chi-square	3.581
	df	3
	Sig.	.310
Q29 Feeling of alienation (distant from others)	Chi-square	3.420
	df	3
	Sig.	.331
Q30 Experience loneliness	Chi-square	.597
	df	3
	Sig.	.897
Q31 Feeling homesick	Chi-square	3.315
	df	3
	Sig.	.346
Q32 Dating	Chi-square	4.223
	df	3
	Sig.	.238

5.3.3.4 Differences in financial problems according to gender

Table 5.33 shows that gender does not have an impact on financial problems of international students at CUT as no significant differences were observed.

Table 5.33: Pearson Chi-Square Tests for differences in financial problems according to gender

Financial problems		Respondent's gender
Q33 Sufficiency of funds to support meet expenses	Chi-square	1.773
	df	3
	Sig.	.621
Q34 Receiving money from home	Chi-square	5.012
	df	3
	Sig.	.171
Q35 Unexpected financial needs	Chi-square	4.812
	df	3
	Sig.	.186
Q36 knowing where to get financial assistance	Chi-square	1.576
	df	3
	Sig.	.665
Q37 Managing my finances	Chi-square	2.018
	df	3
	Sig.	.569
Q38 High cost of living in South Africa	Chi-square	1.443
	df	3
	Sig.	.695

5.3.3.5 Differences in housing/residence problems (Section F)

Table 5.34 shows that gender does not have an impact on housing problems of international students at CUT as no significant differences were observed.

Table 5.34: Pearson Chi-Square Tests for differences in housing problems according to age.

Housing problems		Respondent's gender
Q39 Finding a place to live during college term	Chi-square	2.835
	df	3
	Sig.	.418
Q40 Finding suitable place to live during holidays	Chi-square	4.502
	df	3
	Sig.	.212
Q41 Rooming with students of other nationalities	Chi-square	5.167
	df	3
	Sig.	.160
Q42 University accommodation	Chi-square	4.392
	df	3
	Sig.	.222
Q43 Distance from residence to class	Chi-square	2.200
	df	3
	Sig.	.532

5.3.3.6 Differences in food problems according to gender

Table 5.35 shows that gender has no impact on food problems of international students at CUT as no significant differences were observed.

Table 5.35: Pearson Chi-Square Tests for differences in food problems according to age.

Food problems		Respondent's gender
Q44 Taste of South African food	Chi-square	5.728
	df	3
	Sig.	.126
Q45 Cost of food	Chi-square	3.314
	df	3
	Sig.	.346
Q46 Getting food of my choice	Chi-square	1.550
	df	3
	Sig.	.671
Q47 Adapting to South African food	Chi-square	2.507
	df	3
	Sig.	.474
Q48 Getting my native food	Chi-square	1.867
	df	3
	Sig.	.600

5.3.3.7 Differences in health problems according to gender

Table 5.36 indicates that significant differences exist in two problem items in the health problem area based on the gender of respondents. These observed differences are explored further in Tables 5.37 and 5.38.

Table 5.36: Pearson Chi-Square Tests for differences in health problems based on gender.

Health problems		Respondent's gender
Q49 Cost of health insurance	Chi-square	6.840
	df	3
	Sig.	.077
Q50 Obtaining adequate health insurance	Chi-square	4.353
	df	3
	Sig.	.226
Q51 Access to medical services of choice	Chi-square	14.506
	df	3
	Sig.	.002*
Q52 Adequacy of university health services	Chi-square	9.718
	df	3
	Sig.	.021*
Q53 Getting sufficient exercise	Chi-square	5.504
	df	3
	Sig.	.138
Q54 Adapting to South African climate	Chi-square	6.851
	df	3
	Sig.	.077
Q55 Time to rest	Chi-square	.760
	df	3
	Sig.	.859
Q56 Availability of personal counselling services	Chi-square	1.994
	df	3
	Sig.	.574

* The Chi-square statistic is significant at the 0.05 level.

Table 5.37 shows that while majority of the male respondents (54.4%) see access to medical services of choice as a major problem, the majority of the female respondents (34%) experienced no problems with this item. It is difficult to explain this difference.

Table 5.37: Cross-tab to investigate differences in access to medical services problems according to gender

Q51 Access to medical services of choice	Severity		Q3 Respondent's gender		Total
			Male	Female	
	none	n		12	16
%			27.3%	34.0%	30.8%
minor	n		7	11	18
	%		15.9%	23.4%	19.8%
moderate	n		1	10	11
	%		2.3%	21.3%	12.1%
major	n		24	10	34
	%		54.5%	21.3%	37.4%
Total	n		44	47	91
	%		100.0%	100.0%	100.0%

Table 5.38: Cross-tab to investigate differences in adequacy of university health services according to gender

Q52 Adequacy of university health services	Severity		Q3 Respondent's gender		Total
			Male	Female	
	none	n		9	20
%			20.5%	42.6%	31.9%
minor	n		8	7	15
	%		18.2%	14.9%	16.5%
moderate	n		9	13	22
	%		20.5%	27.7%	24.2%
major	n		18	7	25
	%		40.9%	14.9%	27.5%
Total	n		44	47	91
	%		100.0%	100.0%	100.0%

The results for adequacy of university health services according to gender is consistent with the one obtained for differences in access to medical services problems according to gender. In both cases, males rated the items as major problems while females saw them as no problem. Table 5.38 shows that while 40.9% of the male respondents see access to medical services of choice as a major problem, 42.6% of the female respondents experienced no problems with this item.

5.3.3.8 Differences in immigration problems according to gender

Table 5.39 shows that gender has no impact on immigration problems of international students at CUT as no significant differences were observed

Table 5.39: Pearson Chi-Square test for differences in immigration problems based on gender.

Immigration problems		Respondent's gender
Q57 Friendliness of Immigration officials	Chi-square	1.676
	df	3
	Sig.	.642
Q58 Getting visa extensions	Chi-square	3.873
	df	3
	Sig.	.275
Q59 Feel comfortable visiting immigration office	Chi-square	3.822
	df	3
	Sig.	.281
Q60 Understanding immigration rules	Chi-square	2.911
	df	3
	Sig.	.406
Q61 Work restrictions	Chi-square	1.320
	df	3
	Sig.	.724
Q62 Becoming a citizen of South Africa	Chi-square	.092
	df	3
	Sig.	.993

5.3.3.9 Differences in international student advisory service (Section J)

Table 5.40 indicates that significant differences exist in one item, *adequacy of information at orientation* in the international student advisory problem area based on the gender of respondents. This observed difference is explored further in Table 5.41.

Table 5.40: Pearson Chi-Square test for differences in international student advisory service problems according to gender.

International student advisory service		Respondent's gender
Q63 Availability of useful information	Chi-square	2.497
	df	3
	Sig.	.476
Q64 Helpfulness of international office staff	Chi-square	1.070
	df	3
	Sig.	.784
Q65 Friendliness of international office staff	Chi-square	4.170
	df	3
	Sig.	.244
Q66 Adequacy of information at orientation	Chi-square	8.688
	df	3
	Sig.	.034*
Q67 Obtaining assistance with registration	Chi-square	2.392
	df	3
	Sig.	.495
Q68 Sufficiency of orientation programme	Chi-square	1.154
	df	3
	Sig.	.764

* The Chi-square statistic is significant at the 0.05 level.

Table 5.41 shows that while the majority of male respondents (45.5%) rated *adequacy of information at orientation* as no problem, the female respondents rated it as a minor problem.

Table 5.41: Cross-tab to investigate differences in adequacy of information at orientation according to gender

Q66 Adequacy of information at orientation	Severity		Q3 Respondent's gender		Total
			Male	Female	
	none	N	20	18	38
%		45.5%	38.3%	41.8%	
minor	N	9	20	29	
	%	20.5%	42.6%	31.9%	
moderate	N	8	8	16	
	%	18.2%	17.0%	17.6%	
major	N	7	1	8	
	%	15.9%	2.1%	8.8%	
Total	N	44	47	91	
	%	100.0%	100.0%	100.0%	

5.3.4 Differences in adjustment problems according to age

In order to answer the research question: *are there any significant differences in adjustment problems based on age?* the null hypothesis H_{40} : *perceived adjustment problems facing international students studying at CUT do not differ significantly based on age* had to be tested using the Chi-square test (see Section 5.4 above). The following sections present the results and discussions of the tests of significance on the nine problem areas based on age.

5.3.4.1 Differences in socio/cultural problems according to age

Table 5.42 indicates that three items in the factor **socio/cultural problems** (ease of making friends with South African students; opportunities for social interaction with RSA students; and finding worship place of choice) vary significantly at 0.05

level according to age classification of respondents. This is an indication that age of students influence the way they experience certain socio/cultural problems.

Table 5.42: Pearson Chi-Square test for socio/cultural problems according to age

Socio/cultural problems		Q4 Respondent's age
Q7 Respondent suffering from prejudice	Chi-square	15.269
	df	12
	Sig.	.227
Q8 Respondent's experience of racial discrimination	Chi-square	15.991
	df	12
	Sig.	.192
Q9 Ease of making friends with South African Students	Chi-square	29.835
	df	12
	Sig.	.003*
Q10 Interaction with South African people	Chi-square	20.673
	df	12
	Sig.	.055
Q11 Finding suitable student activities	Chi-square	18.841
	df	12
	Sig.	.092
Q12 Finding my way round campus	Chi-square	18.970
	df	12
	Sig.	.089
Q13 Opportunities for social interaction with RSA students	Chi-square	39.103
	df	12
	Sig.	.000*
Q14 Experience of being called a foreigner	Chi-square	13.238
	df	12
	Sig.	.352
Q15 Finding worship place of my choice	Chi-square	32.360
	df	12
	Sig.	.001*

* The Chi-square statistic is significant at the 0.05 level.

Using cross tabulation, these observed differences were investigated further. The results are reported in Tables 5.43, 5.44, and 5.45.

Table 5.43: Cross-tab to investigate differences in ease of making friends with South African students according to age.

Problem	severity		Q4 Respondent's age					Total
			16 - 19	20 - 25	26 - 29	30 - 35	36 - 39	
Q9 Ease of making friends with South African Students	none	n	2	35	13	3	0	53
		%	66.7%	67.3%	56.5%	27.3%	.0%	58.2%
	minor	n	1	7	6	7	0	21
		%	33.3%	13.5%	26.1%	63.6%	.0%	23.1%
	moderate	n	0	5	3	1	2	11
		%	.0%	9.6%	13.0%	9.1%	100.0%	12.1%
	major	n	0	5	1	0	0	6
		%	.0%	9.6%	4.3%	.0%	.0%	6.6%
	Total	n	3	52	23	11	2	91
		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 5.43 reveals that in all, majority (58.2%) of the international students experienced no problems in making friends with South African students. When analysed in terms of age groups, again, majority of the international students in the age groups (16 to 19 – 66.7%; 20 to 25 – 66.3%; and 26 to 29 - 56.5%) experience no problems in making friends with South African students. 63.6% of the international students in the 30 to 35 years age group experienced minor problems. Majority of international students in the age group (36+ - 100%) experienced moderate problems in making friends with South African students. These figures show that the younger the international student, the easier it is for them to make friends. Why this seems to be the case is difficult to explain.

Table 5.44: Cross-tab to investigate differences in interaction with South African students according to age.

Problem	Severity		Q4 Respondent's age					Total
			16 - 19	20 - 25	26 - 29	30 - 35	36 - 39	
Q10 Interaction with South African people	none	n	2	27	8	2	0	39
		%	66.7%	51.9%	34.8%	18.2%	.0%	42.9%
	minor	N	1	13	11	3	0	28
		%	33.3%	25.0%	47.8%	27.3%	.0%	30.8%
	moderate	N	0	9	4	4	2	19
		%	.0%	17.3%	17.4%	36.4%	100.0%	20.9%
	major	N	0	3	0	2	0	5
		%	.0%	5.8%	.0%	18.2%	.0%	5.5%
	Total	N	3	52	23	11	2	91
		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

For the item interaction with South African people, Table 5.44 shows that the majority of the international students in the age groups (16 to 19, - 66.7%; and 20 to 25, - 51.9%) did not experience any problems. In the age category (26 to 29, - 47.8%) experienced minor problems. Majority of those falling under the age category (36+, - 100%) experienced moderate problems. These figures indicate that although there are differences in which the different age groups experience their interaction with South African people, they did not experience major problems.

Table 5.45: Cross-tab to investigate differences in opportunities for social interaction with South African students according to age.

Q13 Opportunities for social interaction with South African students	Severity		Q4 Respondent's age					Total
			16 - 19	20 - 25	26 - 29	30 - 35	36 - 39	
none	N		3	25	14	5	0	47
	%		100.0%	48.1%	60.9%	45.5%	.0%	51.6%
minor	N		0	17	7	0	0	24
	%		.0%	32.7%	30.4%	.0%	.0%	26.4%
moderate	N		0	7	2	4	0	13
	%		.0%	13.5%	8.7%	36.4%	.0%	14.3%
major	N		0	3	0	2	2	7
	%		.0%	5.8%	.0%	18.2%	100.0%	7.7%
Total	N		3	52	23	11	2	91
	%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

In terms of opportunities for social interaction with South African students, Table 5.45 shows that most of the respondents in the age group (36+, - 100%) experienced major problems while majority of the respondents in the remaining age groups (16 to 19, - 100%; 20 to 25, - 48.1%; 26 to 29, - 60.9%; and 30+, - 45.5%) did not experience any problems. These figures seem to suggest that the youth (that is international students below the age of 36 years) have more opportunities to socialise with South Africans than the older students do. This may mean that international student administrators would have to organise special activities/events for this age group that would bring them into closer contact with the local population.

5.3.4.2 Differences in academic problems according to age

In terms of age, the questionnaire item, participation in class differs significantly at 0.05 level (see Table 5.46). This difference is further explored and the results shown in Table 5.47.

Table 5.46: Pearson Chi-Square test for differences in academic problems based on age

Academic problems		Q4 Respondent's age
Q16 Getting sufficient personal help from my lecturers	Chi-square	5.619
	df	12
	Sig.	.934
Q17 Coping with the volume of assignments	Chi-square	13.641
	df	12
	Sig.	.324
Q18 Coping with assessment methods	Chi-square	14.241
	df	12
	Sig.	.286
Q19 Participation in class	Chi-square	43.591
	df	12
	Sig.	.000*
Q20 Expressing yourself in English	Chi-square	7.778
	df	12
	Sig.	.802
Q21 Working in cooperation with South African students	Chi-square	16.805
	df	12
	Sig.	.157
Q22 Academic advising	Chi-square	10.997
	df	12
	Sig.	.529
Q23 Grading system	Chi-square	18.757
	df	12
	Sig.	.095
Q24 Comprehending lectures	Chi-square	12.319
	df	12
	Sig.	.420
Q25 Getting courses I like	Chi-square	15.281
	df	12
	Sig.	.226
Q26 Class attendance requirements	Chi-square	7.506
	df	12
	Sig.	.822
Q27 Library use	Chi-square	6.576
	df	12
	Sig.	.884

* The Chi-square statistic is significant at the 0.05 level.

Table 5.47 indicates that while the older students had major problems with participation in class, the younger ones did not experience any problems in this regard. Majority of the students in the age groups (16 to 19 years - 100%; 20 to 25 years - 56.9%; 26 to 29 years - 47.8%; and 30 to 35 years – 72.7%) did not experience problems with participation in class. However the age group (36+ - 100%) indicated that they had major problems with participation in class.

Table 5.47: Cross-tab to investigate differences in participation in class according to age

	Severity		Q4 Respondent's age					Total
			16 - 19	20 - 25	26 - 29	30 - 35	36 - 39	
	Q19 Participation in class	none	N	3	29	11	8	0
%			100.0%	56.9%	47.8%	72.7%	.0%	56.7%
minor		N	0	16	5	3	0	24
		%	.0%	31.4%	21.7%	27.3%	.0%	26.7%
moderate		N	0	5	5	0	0	10
		%	.0%	9.8%	21.7%	.0%	.0%	11.1%
major		N	0	1	2	0	2	5
		%	.0%	2.0%	8.7%	.0%	100.0%	5.6%
Total		N	3	51	23	11	2	90
		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

5.3.4.3 Differences in emotional/personal problems according to age

Table 5.48 indicates that emotional/personal problems of international students at CUT do not differ significantly at 0.05 level of significance.

Table 5.48: Pearson Chi-Square Tests for differences in emotional/personal problems according to age

Emotional problems		Respondent's age
Q28 Feel a sense of helplessness	Chi-square	9.390
	df	12
	Sig.	.669
Q29 Feeling of alienation (distant from others)	Chi-square	13.014
	df	12
	Sig.	.368
Q30 Experience loneliness	Chi-square	18.083
	df	12
	Sig.	.113
Q31 Feeling homesick	Chi-square	17.905
	df	12
	Sig.	.119
Q32 Dating	Chi-square	19.597
	df	12
	Sig.	.075

5.3.4.4 Differences in financial problems according to age

One questionnaire item *managing my finances* varies significantly at 0.05 level of significance according to age (see Table 5.49). The observed difference is further analysed and the result presented in Table 5.50.

Table 5.49: Pearson Chi-Square Tests for differences in financial problems according to age

Financial problems		Q4 Respondent's age
Q33 Sufficiency of funds to support meet expenses	Chi-square	20.510
	df	12
	Sig.	.058
Q34 Receiving money from home	Chi-square	18.333
	df	12
	Sig.	.106
Q35 Unexpected financial needs	Chi-square	12.940
	df	12
	Sig.	.373
Q36 knowing where to get financial assistance	Chi-square	13.908
	df	12
	Sig.	.307
Q37 Managing my finances	Chi-square	21.280
	df	12
	Sig.	.046*
Q38 High cost of living in South Africa	Chi-square	12.955
	df	12
	Sig.	.372

* The Chi-square statistic is significant at the 0.05 level.

Table 5.50: Cross-tab to investigate differences in managing finances based on age

Severity		Q4 Respondent's age					Total	
		16 - 19	20 - 25	26 - 29	30 - 35	36 - 39		
none	n	2	18	5	2	0	27	
	%	66.7%	34.6%	21.7%	18.2%	.0%	29.7%	
minor	n	0	3	4	2	2	11	
	%	.0%	5.8%	17.4%	18.2%	100.0%	12.1%	
moderate	n	1	18	9	4	0	32	
	%	33.3%	34.6%	39.1%	36.4%	.0%	35.2%	
major	n	0	13	5	3	0	21	
	%	.0%	25.0%	21.7%	27.3%	.0%	23.1%	
Total		n	3	52	23	11	2	91
		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 5.50 indicates that majority of respondents in the age groups (20 to 25, 34.6%), (26 to 29, 39.1%), and (30 to 35, 36.4%) experienced moderate problems in managing their finances. The majority of respondents according to Table 5.50 experienced minor problems in managing their finances. The majority of respondents from the age group (16 to 19 years, 66.7%) said that they experienced no problems with managing their finances. These figures seem to suggest that the older students experienced greater levels of problems in managing their finances than the younger ones. These variations are surprising. Normally one would have expected the younger students instead of the older ones to report higher levels of problems with managing their finances. Nonetheless it does reveal that age does influence financial problems of international students.

5.3.4.5 Differences in housing/residence problems (Section F)

Table 5.51 shows that there are no significant differences in the international students' perception of housing problems at 0.05 level of significance based on age.

Table 5.51: Pearson Chi-Square Tests for differences in housing problems according to age.

Housing problems		Q4 Respondent's age
Q39 Finding a place to live during college term	Chi-square	15.850
	df	12
	Sig.	.198
Q40 Finding suitable place to live during holidays	Chi-square	11.428
	df	12
	Sig.	.493
Q41 Rooming with students of other nationalities	Chi-square	13.425
	df	12
	Sig.	.339
Q42 University accommodation	Chi-square	13.087
	df	12
	Sig.	.363
Q43 Distance from residence to class	Chi-square	13.548
	df	12
	Sig.	.330

5.3.4.6 Differences in food problems according to age

Table 5.52 reveals that one food problem item, getting one's native food, differs significantly at the 0.05 level of significance according to age. This observed difference is explored further in Table 5.53.

Table 5.52: Pearson Chi-Square Tests for differences in food problems according to age.

Food problems		Q4 Respondent's age
Q44 Taste of South African food	Chi-square	12.383
	df	12
	Sig.	.415
Q45 Cost of food	Chi-square	16.559
	df	12
	Sig.	.167
Q46 Getting food of my choice	Chi-square	13.783
	df	12
	Sig.	.315
Q47 Adapting to South African food	Chi-square	12.642
	df	12
	Sig.	.396
Q48 Getting my native food	Chi-square	32.929
	df	12
	Sig.	.001*

* The Chi-square statistic is significant at the 0.05 level.

According to Table 5.53, majority of the respondents from the age groups (20 to 25 years – 51.9%) and (26 to 29 years – 52.2%) experienced no problems with getting their native food. Majority (63.5%) of the respondents from the 30 to 35 year age group reported minor problems. The majority (100%) of the respondents from the age group 36 to 39 years reported moderate problems with obtaining their native food. The respondents in the age group 16 to 19 years indicated that they faced moderate (33.3%) and major (33.3%) problems in getting their native food while another 33.3% of the same group said they did not encounter any problems in getting their native food

Table 5.53: Cross-tab to investigate differences in getting native food problems according to age.

Q48 Getting my native food	Severity		Q4 Respondent's age					Total
			16 - 19	20 - 25	26 - 29	30 - 35	36 - 39	
	none	n	1	27	12	0	0	40
%		33.3%	51.9%	52.2%	.0%	.0%	44.0%	
minor	n	0	16	3	7	0	26	
	%	.0%	30.8%	13.0%	63.6%	.0%	28.6%	
moderate	n	1	6	3	1	2	13	
	%	33.3%	11.5%	13.0%	9.1%	100.0%	14.3%	
major	n	1	3	5	3	0	12	
	%	33.3%	5.8%	21.7%	27.3%	.0%	13.2%	
Total	n	3	52	23	11	2	91	
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

5.3.4.7 Differences in health problems according to age

Table 5.54 indicates that there are no significant differences in health problems at the 0.05 level of significance according to age.

Table 5.54: Pearson Chi-Square Tests for differences in health problems according to age.

Health problems		Q4 Respondent's age
Q49 Cost of health insurance	Chi-square	19.983
	df	12
	Sig.	.067
Q50 Obtaining adequate health insurance	Chi-square	14.883
	df	12
	Sig.	.248
Q51 Access to medical services of choice	Chi-square	15.246
	df	12
	Sig.	.228
Q52 Adequacy of university health services	Chi-square	8.976
	df	12
	Sig.	.705
Q53 Getting sufficient exercise	Chi-square	16.154
	df	12
	Sig.	.184
Q54 Adapting to South African climate	Chi-square	13.298
	df	12
	Sig.	.348
Q55 Time to rest	Chi-square	10.038
	df	12
	Sig.	.613
Q56 Availability of personal counselling services	Chi-square	15.275
	df	12
	Sig.	.227

5.3.4.8 Differences in immigration problems (Section I)

Table 5.55 indicates that there are no significant differences in immigration problems at the 0.05 level of significance according to age.

Table 5.55: Pearson Chi-Square Tests for differences in immigration problems according to age.

Immigration problems		Q4 Respondent's age
Q57 Friendliness of Immigration officials	Chi-square	12.602
	df	12
	Sig.	.399
Q58 Getting visa extensions	Chi-square	8.797
	df	12
	Sig.	.720
Q59 Feel comfortable visiting immigration office	Chi-square	19.395
	df	12
	Sig.	.079
Q60 Understanding immigration rules	Chi-square	17.623
	df	12
	Sig.	.128
Q61 Work restrictions	Chi-square	20.300
	df	12
	Sig.	.062
Q62 Becoming a citizen of South Africa	Chi-square	14.837
	df	12
	Sig.	.250

5.3.4.9 Differences in international student advisory service according to age

Table 5.56 indicates that two items under the factor international student advisory service (friendliness of international office staff, and sufficiency of orientation programme) differ significantly according to age. These observed differences are further explored and the results shown in Tables 5.57 and 5.58

Table 5.56: Pearson Chi-Square Tests for differences in international student service problems according to age.

International student advisory service problems		Q4 Respondent's age
Q63 Availability of useful information	Chi-square	12.453
	df	12
	Sig.	.410
Q64 Helpfulness of international office staff	Chi-square	13.049
	df	12
	Sig.	.365
Q65 Friendliness of international office staff	Chi-square	21.462
	df	12
	Sig.	.044*
Q66 Adequacy of information at orientation	Chi-square	6.370
	df	12
	Sig.	.896
Q67 Obtaining assistance with registration	Chi-square	13.097
	df	12
	Sig.	.362
Q68 Sufficiency of orientation programme	Chi-square	26.299
	df	12
	Sig.	.010*

* The Chi-square statistic is significant at the 0.05 level.

According to Table 5.7, majority of the respondents in the age groups (16 to 19 years – 66.7%), (20 to 25 years – 50%), (26 to 29 years – 43.5%), and (30 to 35 years – 54.5%) indicated that they had no problems with the friendliness of immigration staff. However, a majority (100%) of the respondents aged between 36 to 39 years reported moderate problems with the friendliness of international office staff.

Table 5.57: Cross-tab to investigate differences in friendliness of international student office staff according to age

Q65 Friendliness of international office staff	Severity	Q4 Respondent's age					Total
		16 - 19	20 - 25	26 - 29	30 - 35	36 - 39	
		N	%	N	%	N	
none	N	2	26	10	6	0	44
	%	66.7%	50.0%	43.5%	54.5%	.0%	48.4%
minor	N	1	9	9	5	0	24
	%	33.3%	17.3%	39.1%	45.5%	.0%	26.4%
moderate	N	0	10	2	0	2	14
	%	.0%	19.2%	8.7%	.0%	100.0%	15.4%
major	N	0	7	2	0	0	9
	%	.0%	13.5%	8.7%	.0%	.0%	9.9%
Total	N	3	52	23	11	2	91
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

In terms of the sufficiency of orientation programmes, Table 5.58 indicates that majority of the respondents in the age groups (16 to 19 years – 100%), (20 to 25 years – 34.6%), (26 to 29 years – 52.2%), and (30 to 35 years – 63.6%) indicated that they had no problems. However, a majority (100%) of the respondents aged between 36 to 39 years reported moderate problems.

Table 5.58: Cross-tab to investigate differences in sufficiency of orientation programme according to age

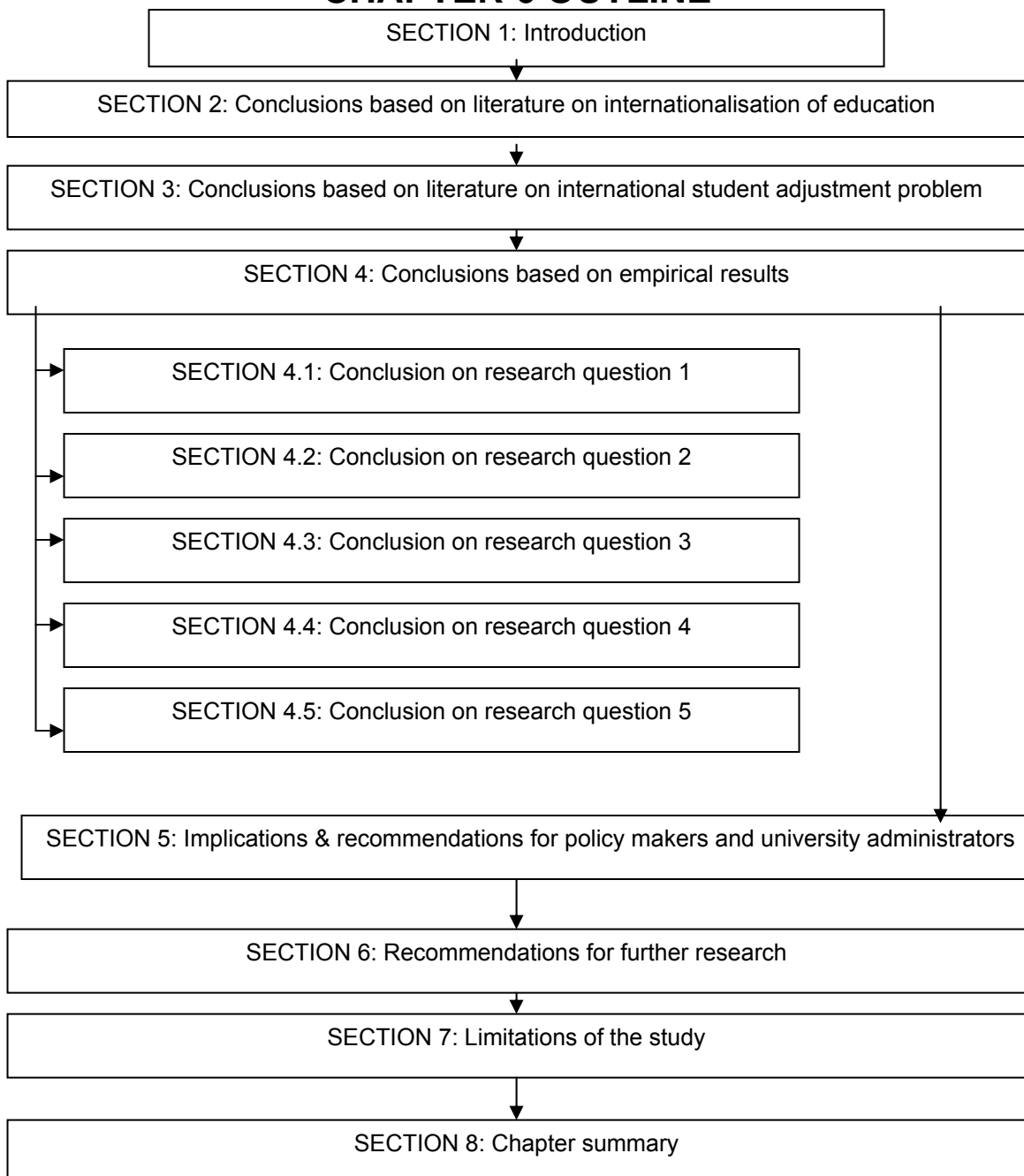
Q68 Sufficiency of orientation programme	Severity		Q4 Respondent's age					Total
			16 - 19	20 - 25	26 - 29	30 - 35	36 - 39	
	none	n	3	18	12	7	0	40
%		100.0%	34.6%	52.2%	63.6%	.0%	44.0%	
minor	n	0	18	7	3	0	28	
	%	.0%	34.6%	30.4%	27.3%	.0%	30.8%	
moderate	n	0	8	0	1	2	11	
	%	.0%	15.4%	.0%	9.1%	100.0%	12.1%	
major	n	0	8	4	0	0	12	
	%	.0%	15.4%	17.4%	.0%	.0%	13.2%	
Total	n	3	52	23	11	2	91	
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

5.4 CHAPTER SUMMARY

In this chapter the results of the empirical studies was presented. Frequency tables and percentages were used to describe the data obtained from respondents. The results of the inferential statistics (data analysis) were presented and extensively discussed. This includes Chi-square tests to determine presence or absence of significant differences in various adjustment problem areas based on three demographic variables *country/region of origin*, *gender*, and *age* of the respondents. A number of significant differences were observed.

The next chapter concludes the report by drawing conclusions based on these findings; discussing implications of the conclusions for university authorities and higher education policy makers; and making recommendations for future research on the international student adjustment phenomenon.

CHAPTER 6 OUTLINE



CHAPTER 6: CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

6.1 INTRODUCTION

This is a descriptive study of the nature of adjustment problems unique to international students at CUT, a South African university. Chapter 1 served as a general introduction to the study; Chapters 2 and 3 dealt with the literature survey; Chapter 4 focused on the research design and methodology applied to the study; and in Chapter 5, the results of the empirical investigation were presented and discussed.

This Chapter (6) concludes the study by presenting the conclusions drawn based on findings. This is followed by a discussion of implications of the results of the study for university authorities and higher education policy makers. The chapter ends with recommendations for future research on international student adjustment phenomenon.

6.2 CONCLUSIONS BASED ON THE LITERATURE ON THE INTERNATIONALISATION OF EDUCATION

It is clear from the literature review in Chapter 2 that virtually every country wants to or is trying to internationalise its education system.

It is also evident that although the western world notably the USA, Canada, the UK, and Australia remain the preferred destinations for international student, the developing countries especially India and South Africa are beginning to attract substantial numbers of international students.

The literature also seems to support the notion that the upsurge in the competition for international students stems from perceived economic and none economic benefits for recipient institution and host country. Even international students believe they gain a lot by acquiring their education outside their own countries. Similarly, sending countries are believed to derive benefits when their citizens study in foreign countries. Cultural understanding is recognised as the greatest none economic benefit derivable from international education.

All of these perceived benefits make internationalisation of educational systems appealing. However, there is a number associated problems chief among them being student adjustment difficulties that can not be ignored. Authorities in charge of international students need thorough awareness of these difficulties in order to help them settle down with minimum difficulty.

6.3 CONCLUSIONS BASED ON THE LITERATURE ON THE INTERNATIONAL STUDENT ADJUSTMENT PROBLEM PHENOMENON

The literature has revealed several possible adjustment problems international students are likely to encounter in their new educational environment. The literature in Chapter 3 shows that although substantial studies has been undertaken in the developed countries, little has been done to understand the international student phenomenon as it applies to the developing countries. This means that more research in the developing country context is necessary to bridge this gap.

Since conditions in the western world differs from that of the third world countries, the design of research efforts should take into consideration the special circumstances of third world countries. For example issues that may pose problematic for international students in Europe may not be relevant to Africa. In other words, problems may differ from one setting to the other.

For the purpose of this study, adjustment problems of international students were grouped under nine problem areas. These are: **Social/cultural, Academic, Emotional/personal, Financial, Housing/Residence, Food, Health, Immigration, and International student advisory service problems.**

6.4 CONCLUSIONS FROM THE EMPIRICAL RESULTS

The empirical investigation focused on the above nine problem areas in order to answer the research questions.

6.4.1 Research question 1

The first research question was “What are the main adjustment problems for international students studying at CUT”? To answer this question, percentage analysis was used. Analysis of responses reveals 92% (57) of the 62 questionnaire items as major problems for respondents (see Table 5.3). The 57 items were regarded as too large a number. The decision was therefore made to identify ten most important adjustment problems.

Conclusion:

Based on the data in Tables 5.3 and 5.4, the conclusion is made that: 1. unfriendliness of immigration, 2. high cost of living in South Africa, 3. cost of food, 4. cost of health insurance, 5. getting visa extension, 6. discomfort in visiting visa office, 7. work restrictions, 8. becoming citizen of South Africa, 9. understanding immigration rules, and 10. sufficiency of funds to meet expenses form the main adjustment problems for international students.

6.4.2 Research question 2

The second research question was “What is the overall assessment of international student adjustment experiences at CUT”? In other words how do CUT international students rate their overall adjustment experiences as either problematic (major or moderate problem) or no problem (minor or no problem)?

In order to answer this question the following hypothesis was tested:

(H_{1o}): International students at CUT do not regard their adjustment experiences as problematic.

(H_{1a}): International students at CUT regard their adjustment experiences as problematic.

In Chapter 5, the combined scores for the overall assessment of the adjustment experiences shown to be 56.7% (see Table 5.3) which is well over the 40% threshold (see Chapter 4 Section 4.9.5.1 for detailed discussion). In other words, the majority (56.7%) of respondents rated their experiences as problematic. This means that international students regard their experiences as problematic.

Conclusion:

Based on the above evidence, the null hypothesis (H_{1o}): International students at CUT do not perceive their adjustment experience as problematic does not seem to be supported therefore the alternate hypothesis **(H_{1a}): International students at CUT regard their adjustment experiences as problematic was accepted.**

6.4.3 Research question 3

The third research question was “are there any significant differences in adjustment problems based on country/region of origin”?

In order to answer this question the following hypothesis was tested:

(H_{2o}): Perceived adjustment problems facing international students studying at CUT do not differ significantly based on country/geographic region of origin.

(H_{2a}): Perceived adjustment problems facing international students studying at CUT differ significantly based on country/geographic region of origin.

Tables 5.5, 5.8, 5.10, 5.13, 5.15, 5.16, and 5.21 show that, based on country/region of origin, adjustment experiences for international students at CUT differ significantly at 0.05 level of significance in the socio/cultural, academic, emotional/personal, financial, food, and health problem areas respectively.

Conclusion:

Based on the above evidence and the fact that significant differences exist in at least one problem area, the null hypothesis *H_{2o}: perceived adjustment problems facing international students studying at CUT do not differ significantly based on country/geographic region of origin*, is not supported. **Therefore, the alternative hypothesis (H_{2a}): Perceived adjustment problems facing international students studying at CUT differ significantly based on country/geographic region of origin** is accepted

6.4.4 Research question 4

The fourth research question was “are there any significant differences in adjustment problems based on gender”?

In order to answer this question the following hypothesis was tested:

(H_{3o}): Perceived adjustment problems facing international students studying at CUT do not differ significantly based on gender

(H_{3a}): Perceived adjustment problems facing international students studying at CUT differ significantly based on gender

Tables 5.29, 5.36, and 5.40 show that based on gender, adjustment experiences for international students at CUT differ significantly at 0.05 level of significance in the academic, health, and international student advisory service problem areas respectively.

Conclusion

Based on the above evidence and the fact that significant differences exist in at least one problem area, there is no support for the null hypothesis, *H_{3o}*: *Perceived adjustment problems facing international students studying at CUT do not differ significantly based on gender*. **Therefore, the alternative hypothesis H_{3a}: Perceived adjustment problems facing international students studying at CUT differ significantly based on gender** is accepted.

6.4.5 Research question 5

The fifth research question was “Are there any significant differences in adjustment problems based on age”?

In order to answer this question the following hypothesis was tested:

(H_{4o}): Perceived adjustment problems facing international students studying at CUT do not differ significantly based on age

(H_{4a}): Perceived adjustment problems facing international students studying at CUT differ significantly based on age

Tables 5.42, 5.46, 5.49, 5.52, and 5.56 show that based on age, adjustment experiences for international students at CUT differ significantly at 0.05 level of significance in socio/cultural, academic, financial, food, and international student advisory service problem areas respectively.

Conclusion

Based on the above evidence and the fact that significant differences exist in at least one problem area, there is no support for the null hypothesis, *H_{4o}: Perceived adjustment problems facing international students studying at CUT do not differ significantly based on age* is not supported. Therefore, the alternate hypothesis **H_{4a}: Perceived adjustment problems facing international students studying at CUT differ significantly based on age** is accepted.

6.5 IMPLICATIONS AND RECOMMENDATIONS

In this section implications and suggestions for facilitating international students' adjustment process are delineated.

But before proceeding with recommendations, it is worth pointing out that this study like all the previous empirical investigations referred to in the literature survey, has found that adjustment problems are real and numerous at CUT. International student administrators at CUT must also realise that as long as CUT pursues the policy of internationalisation of education through the recruitment of international students, these problems are unavoidable consequences that cannot be totally eliminated but can at least be managed (reduced to tolerable levels). The emphasis should therefore be on reducing and managing the adjustment problems.

Coming back to recommendations, it is worth pointing out that in order not to turn the exercise into a kind of 'wish list', the recommendations are directed mostly at CUT and based on the findings specific to this study. The recommendations specifically directed at CUT are aptly labelled *institutional actions* whilst those directed at policy makers are termed *policy action*.

Institutional action 1 - support

Obviously, because of the inevitability of adjustment problems for international students, it behoves upon student administrators at CUT to institute appropriate support systems that will assist international students to cope with their task of adjusting. Support should be sought from local students and lecturers in this regard. Jou and Hiromi (1995) found that support provided by local Japanese students and lecturers significantly assisted in the adjustment of Chinese students in Japanese universities. University administrators will have to devise

means of actively involving academic staff and local students in supporting international students.

Institutional action 2 – *involvement/ social integration*

It is reasonable to conclude that social integration can lead to the lessening of adjustment problems for international students. This is based on the belief that the more international students are socially involved in host institution, the more they are likely to understand their host and in turn be understood by their host. This in turn has the potential of reducing prejudices and unnecessary tension.

The lack of social integration is evident for CUT international students. Although these items do not rank in the top ten, the very high percentages of socio-cultural problem items (see Table 5.3 for percentage analysis) are indicative of the lack of social integration of international students at CUT. This means that student affairs administrators at CUT have to find ways of getting international students actively involved in social activities.

But dealing with this particular problem should not be superficial. In order to adequately deal with the reported high levels of social non-participation by international students at CUT, it is firstly recommend that research be conducted into why this is the case and how best to get international students involved.

Even without the suggested research, something can be done in the interim. It is therefore secondly recommended that special *international student days* be introduced at CUT where activities that can enhance contact with South Africans are undertaken. The neighbouring university, – the University of the Free State (UFS) has a similar occasion where on an annual basis students from all cultural groupings and nationalities showcase their diverse cultural heritage. Currently, this does not happen at CUT. It is recommended that this practice is introduced at CUT without delay since this can lead to cultural understanding hence

tolerance through integration. This will assist among others in reducing the high levels of xenophobia and prejudice reported in this study (see Table 5.3 for percentage analysis).

Institutional action 3 – *academic integration*

The arguments and recommendations for social integration hold for academic integration of international students. Again, Table 5.3 indicates that international students have problems with academic issues. The high total percentage scores of 57.2%, 56.1%, 56.1%, 55.1%, 44.0%, and 43.4%, for the academic problem items, coping with volume of assignments, coping with assignment methods, understanding grading systems, academic advising (or the lack of it), getting help from lecturers, and class participation respectively is a clear signal to CUT attend to academic issues affecting international students. These problems seem to be linked to the insufficient orientation reported by international students. It is recommended that an extended time is devoted to explaining all academic related issues and expectations to international students.

It is also possible that these difficulties are not peculiar to only international students. This is because, informal conversations with local students by the researcher suggests that these frustrations cut across nationalities. It is therefore recommended that additional to taking actions directed at international students, formal research should be done to determine whether these problems are generic. If the problems are found to be general, then CUT academic personnel must be made to reassess their teaching and assessment methods.

Institutional action 4 – *orientation*

With a total percentage of 56.1%, International students experienced great problems with sufficiency of orientation programme. It is recommended that CUT re-design and implement an extensive orientation program to particularly explain

immigration procedures, the South African educational system, culture, values and attitudes to international students. This could assist the students in understanding and coping with their adjustment problems.

Policy action - *immigration*

The fact that six immigration items rank among the ten most important adjustment problems coupled with the fact that friendliness (or the lack of it) of immigration officials rank as the single most important adjustment problem (see Tables 5.3 and 5.4) is an indictment on the department of home affairs. While individual behaviours are not policy issues as such, home affairs department can do well to educate their staff on the fact that they represent the face of the hospitality and the friendliness of the entire nation.

However, the problems of delays in visa extensions, work restrictions, and difficulties in becoming South African citizen are obvious issues that policy makers have to pay attention to. Since the researcher is not an expert in immigration or international relations it is difficult to make any meaningful recommendation except to caution that unless these issues are addressed by policy makers, it has the potential of undermining the competitiveness South African universities in the global market for international students.

6.6 RECOMMENDATIONS FOR FUTURE RESEARCH

More studies are needed to fully understand the general student adjustment process. Similarly, more studies are needed to shed light on the specific problem of international student adjustment difficulties in South African universities. Furthermore, there is need for empirical research to support the plethora of normative assertions in the international student literature. Based on the findings

from this study, recommendations for future research can be made in the following areas.

1. Identifying adjustment problems is only one step in dealing with the whole question of international student adjustment problem. As mentioned in section 6.5 above, support for international students is crucial to their ability to deal with problems of adjustment. All problems cannot rely on the same support system. Support needs to match situation. There is therefore the need to carry out scientific investigation into the kind of support that can assist international students in dealing with specific problems.
2. As mentioned in an earlier chapter, single institutional studies are important for identifying adjustment problems. However they are limited in terms of generalizability of findings. There is therefore need for a nation wide multi institutional study of international student adjustment in South African Universities.
3. Another area in need of research is comparison study of the adjustment problems of local and international student studying in South African universities.
4. It is also recommended that since the usefulness of latitudinal studies like the present one have their inherent limitations, as suggested by Yang and Clum (1995: 66), future research on the subject should also include longitudinal studies.
5. There is also need for empirical research on the net real benefits of internationalisation of education for South Africa. So far, what ever benefits South Africa can derive are largely based on normative assertions and at best based on experiences of the developed world. According to

- Sam (2001), the claims to benefits from internationalisation are assumptions that are not adequately supported. Judging by such statements, there is the need for confirmation with empirical data generated in the South African setting.
6. Another potential area of research is to investigate challenges that South African universities are encountering in trying to provide effective support for international students.
 7. In Section 6.5, it was postulated that difficulties might not be peculiar to only international students. It is therefore recommended that research should be done to determine whether or not adjustment problems are general to both international and home students.
 8. It is finally recommend that research be conducted to investigate the high levels of social non-participation by international students at CUT and how best to get international students involved.

6.7 LIMITATIONS OF THE STUDY

The following limitations are acknowledged for the study. These limitations could particularly affect the reliability and generalizability of the results and should therefore be noted.

1. Although there are close to thirty universities in South Africa, the study was limited to only a single institution, CUT (See Chapter 3 for further discussion). Still, only the Bloemfontein campus was covered and did not include international students of the other campuses. This is likely to affect the extent of generalizability of the results. The ideal thing would have been to include international students of the other campuses. However,

due to mainly financial and time constraints, it was not possible to include other campuses and other universities in South Africa.

2. The analysis is limited to only select demographic characteristics that might appear inexhaustive. However, the list was considered sufficient for the purpose of this study.
3. The study is limited to students who were present on campus during the period June to November 2006. It therefore did not include students who might have dropped out during the beginning of the academic year that is the period between January to May 2006. This is likely to omit the views of international students who might have dropped out because of adjustment problems.

6.8 CHAPTER SUMMARY

This chapter has drawn conclusions about international student adjustment experiences at CUT based on the findings from the empirical research and literature survey. The major empirical findings were that international students experience major problems in 57 out of the 62 problem items; international students at CUT regard their adjustment problems as problematic; international students' experiences at CUT vary significantly based on country/region of origin, gender, and age. Implications of these conclusions for university authorities and higher education policy makers were fully discussed. The chapter also provided recommendations for policy makers and university authorities on how to deal with the issue of international student adjustment to academic and social life of host countries and institutions. A number of areas were identified for future research on international student adjustment. Finally, limitations of the study were highlighted.

In conclusion one might want to ponder over the relevance of what Confucius, the great philosopher of old ones said, *the superior man makes the difficulty to be overcome his first interest success only comes later*. It is indeed easy to conclude that students go abroad to gain knowledge that will make them become 'superior' in their chosen fields of study/endeavour. It is also true some people believe that surmounting difficulties make heroes. However, it is unlikely international students want to become some kind of a 'heroes' by surmounting adjustment difficulties. This study has shown that unless university authorities identify the adjustment problems of their international students and devise means to reduce them, their institutions will not be able to compete for this important segment of students. This study has highlighted the most pressing adjustment problems that CUT student administrators need to attend to.

Bibliography

- Al-Sharidey, K.A. & Goe, W.R. 1998. Ethnic communities within the university: Examination of factors influencing personal adjustment of international students. *Research in Higher Education*, Vol. 39, no. 6.
- Alvesson, M. & Sköldberg, K. 2000. *Reflective methodology*. London: Sage.
- Altbach, P. G. 1999. Globalizing higher education: buyers beware. *Christian Science Monitor*. Vol. 91. No. 17: 11.
- Amundson, J. 1999. International students in the university environment: transitional experience and residence life. Unpublished masters dissertation. University of Regina.
- Anderson, B. & Maharasoa, M. 2002. Internationalisation of higher education: Facilitating partnerships between Universities. *South Africa Journal of Higher Education*. Vol. 16. No. 1: 15-20.
- Anderson, G. & Arsenault, N. 2002. Fundamentals of educational research. 2nd Ed. London: Routledge/Falmer.
- Babbie, E. & Mouton, J. 2005. The practice of social research. Cape Town: Oxford publishers.
- Barakat, H. A. 1988. A study of the problems facing foreign students attending Michigan State University in 1988. Unpublished doctoral dissertation. Michigan State University.
- Bless, C. & Higson-Smith, C. 2005. Fundamentals of Social Research methods. An African Perspective. 3rd Ed. Juta: Cape Town.

- Butcher, A.P. 2004. Educate, consolidate, immigrate: educational immigration in Auckland, New Zealand. *Asia pacific Viewpoint*. Vol. 45, No. 2.
- Cheng, E. H. 1999. A study of international student's adjustment problems at the University of South Dakota. Unpublished doctoral dissertation. University of South Dakota.
- Cheng, C. L., Ding, J. & Perez. 1998. Validation of the East Asian student stress inventory. *American Journal of Health Studies*. 14 (3).
- Chickering, A. W. & Reisser, L. 1993. Education and Identity. 2nd Ed. San Francisco: Jossey-Bass Publishers.
- Cigularova, D. K. 2005. Psychosocial adjustment of international students. *Journal of student affairs*. Vol. XIV: 17-24.
- Cohen, L. Manion, L. and Morrison, K. 2005. Research methods in Education. 5th Ed. New York: Routledge/Falmer.
- Cooper, D. R. & Schindler, P. S. 2001. Business Research Methods. 7th Ed. New York: McGraw-Hill.
- Creswell, J. W. 1994. Research design. Qualitative and Quantitative Approaches. London: Sage.
- Crotty, M. 1998. *The foundations of social research: Meaning and perspective in the research process*. London: Sage.
- David Arnold Institute of International Education (DAIIE). 2001. Globalisation of Higher Education: What it means for India. A paper presented at a

roundtable conference on internalisation of Higher in India. Organised by the Association of Indian universities. Available at http://www.iie.org/Content/NavigationMenu/News_Announcements/Speeches

Denscombe, M. 2005. *The Good Research Guide for small-scale social research projects*. 2nd Ed. Maidenhead: Open University Press.

De Vos, A. S. Strydom, H. Fouche, C. B. & Delport, C. S. L. 2002. *Research at Grass roots for the social science and human services professions*. 2nd Ed. Pretoria: Van Schaik.

Diamantopoulos, A. & Schlegelmilch, B. B. 2004. *Taking the Fear Out of Data Analysis. A Step-by-Step Approach*. London: Thomson Learning.

Duerto, A. M. 2004. *Effects of combined economic and linguistic backgrounds on adjustment process of international undergraduate students at Virginia Polytechnic Institute and State University*. Unpublished doctoral dissertation. Virginia Polytechnic Institute and State University.

Dzansi, D. Y. 2004. *Social responsibility of SMMEs in rural communities*. Unpublished Doctoral thesis. University of Pretoria.

Gadamer, H. G. 1976. *Universality of the hermeneutical problem*. In Linge (Ed.), *Philosophical hermeneutics* (page 3-17). Berkeley: University of California Press.

Gay, L. R. & Airasian, P. 2003. *Educational research. Competences for analysis and application*. 7th Ed. Ohio: Prentice Hall.

- Geelhoed, R. J. 2003. A quantitative investigation of US students' experiences in an international environment. *Journal of College student Development*. Obtainable:
http://www.findarticles.com/p/articles/mi_qa3752/is_200301/ai_n9190880.
Date accessed 24/01/2006.
- Habu, T. 2000. The irony of globalisation: Experience of Japanese women in British Higher Education. *Higher Education*. 39: 43-66.
- Humfrey, C. 1999. *Managing International Students: Recruitment to graduation*. Buckingham. Open University Press.
- International Education Association of South Africa (IEASA). 2006. *Study South Africa. The Guide to South African higher Education*. 6th Ed. Durban: IEASA.
- Jansen, J. K. & Kristof-Brown. 1998. Towards a multi-level theory of person-environment fit. *Academy of management proceedings*.
- Junius, D. P. 1997. A study of problems experienced by international students at Northern Arizona University. Unpublished doctoral dissertation. Northern Arizona University.
- Jou, Y. H. & Hiromi, F. 1995. Effect of social support from various sources on the adjustment of Chinese students in Japan. *Journal of Social Psychology*. Vol. 135, Issue 3. Page 305 – 308. Washington.
- Klineberg, O. 1970. Psychological aspects of student exchange. In Eide, I. (Ed), *Students as Links Between Cultures*. Universitetsforlaget: Oslo.

- Kono, A. 1999. Adaptation to a new culture: A study of international students' experiences. Unpublished doctoral dissertation. Texas Woman's University. Denton. Texas.
- Lanz, J. G. 1985. Factors relating to academic and social adjustment of international graduate students in the school of education at the University of Pittsburgh. Unpublished doctoral dissertation. University of Pittsburgh.
- Leedy, P. D. & Ormrod, J. E. 2005. 8th Ed. Practical research. Planning and Design. New Jersey: Pearson.
- Leung, C. 2001. The psychological adaptation of overseas and migrant students in Australia. *International Journal of psychology*. Vol. 36. Issue 4. Pages 251 – 259.
- Lutabingwa, J. L. 2005. Internationalisation at South African universities: The role of central international office. *South Africa Journal of Higher Education*. Vol. 19. Issue 6. Pages 1108 – 1119.
- Mastenhauser, A. J. 1983. Learning from sojourners. In Landis, D. & Brislin, R. W. (Ed). Handbook of Intercultural Learning. Vol 2. Pages 153 – 185.
- Maudeni, T. 1999. African females and adjustment to studying abroad. *Gender and Education*. Vol. 11, No. 1: 27-42.
- McCalment, R. D. 1985. The development of an inventory to measure returning adult student adjustment at selected Midwest two-year colleges. Unpublished doctoral dissertation. Oklahoma State University.
- McMillan, J. H. & Schumacher, S. 2001. Research in Education: A conceptual introduction. 5th Ed. London: Addison Wesley Longman.

- Moi, J. S. 1989. Experiential involvement as an adjunct teaching cultural sensitivity. *Journal of Multicultural Counselling an Development*. Vol. 17. pages 38 – 46.
- Nebedum-Ezeh, G. C. 1997. An examination of the experiences and coping strategies of African students at predominantly white institutions of higher education in the United States. Unpublished doctoral dissertation. University of Massachusetts, Amherst.
- Nesdale, D. & Todd, P. 2000. Effect of contact on multicultural acceptance: A field study. *International Journal of Intercultural Relations*. Vol. 24. pages 341 – 360.
- North Western University. 2001. Adjusting to life in a international culture. An orientation document for studying broad. Obtained at:
http://www.northwestern.edu/studyabroad/forms/cultural_adjustment.pdf.
Date accessed, 25/01/2006.
- Paige, M. R. 1990. International students: Cross-cultural psychological perspectives. In Brislin, R. W. (Ed). *Applied Cross-Cultural psychology*. Sage Publications: London. Pages 161 – 185.
- Ramphele, M. No date. The challenge: The issue of international students and financing at South African tertiary institutions. Available at
http://www.polity.org.za/html/govdocs/qree_papers/migration/aliens.html
- Salmon, P. 1992. *Achieving a PhD: Ten students' experiences*. Staffordshire: Trentham Books.
- Sam, D. L. 2001. Satisfaction with life among international students: An exploratory study. *Social Indicator Research*. Vol. 53. Page 315 - 337.

- Sargeant, A. 2005. marketing Management for Non-profit Organizations. 2nd ed. Oxford: Oxford University Press.
- Saunders, M. Lewis, P. & Thornhill, A. 2000. research methods for business students. 2nd ed. Harlow: Prentice Hall.
- Seale, C. 2004. (ED). Researching society and culture. 2nd Ed. London: Sage.
- Sekaran, U. 1992. Research Methods for Business: A Skill Building Approach. Second Edition. New York: Wiley.
- Seo, S. & Koro-Ljungberg, M. 2005. A Hermeneutical Study of Older Korean Graduate Students' Experiences in American Higher Education: From Confucianism to Western Educational Values. *Journal of Studies in International Education*. Vol. 9 No.2. Pages 164 – 187.
- Shindondola, H. K. 2002. Xenophobia in South Africa: the views, opinions, and experiences of international students at the Rand Afrikaans University. Unpublished masters dissertation. Rand Afrikaans University.
- Schwandt, T. 1998. Constructivist, interpretivist approaches to human inquiry. In Denzin, N. & Lincoln, Y. (Ed), *The landscape of qualitative research: Theories and issues*. Pages 221 – 259. Thousand Oaks, CA: Sage.
- Teichler, U. 1999. Internationalisation as a challenge for higher education in Europe. *Tertiary Education and Management*. Vol. 5: 5-23.
- Terre Blanch, M. & Durrheim, K. 2004. (ED). Research in practice: Applied methods for the social sciences. Cape Town: UCT.

Danish Ministry of Education, National Education Authority, the International Unit.
2004. Enhanced Internationalisation of the Danish Education and Training.
Policy Paper to Parliament. [http://www.
pub.uvm.dk/2004/internationalisation](http://www.pub.uvm.dk/2004/internationalisation).

Tredoux, C. & Durrheim, K. (Ed). 2002. Numbers, Hypotheses & Conclusions: A
course in Statistics for the Social Sciences. Cape Town: UCT Press.

UOFS (University of the Free State) Centre for Higher Education Studies and
Development, Student learning & development (HOS 723) study guide.
2005. Student learning and development. Pages: 65-70.

Wang, Z. 2004. Studying in the US: Chinese graduate students' experiences of
academic adjustment. Unpublished doctoral dissertation. University of
Illinois at Urbana-Champaign. Urbana., Illinois.

Ward, C. 2001. The impact of international students on domestic students and
host institutions. A literature review. A document prepared for the New
Zealand Ministry of Education to inform policy on international education.

Wikipedia. 2006. Student development theories. Available at
http://en.wikipedia.org/wiki/Student_development_theories.

Williams, F. C. & Buttler, S. K. 2003. Concerns of newly arrived immigrant
students in the US. *Professional School Counselling*. Vol. 7. Issue 1: 9-14.

Wong, D. K. S. 1991. Problems of foreign students attending the University of
Arkansas and recommended solutions. Unpublished doctoral dissertation.
University of Arkansas.

- Yang, B. & Clum, G. A. 1995. Measures of Life Stress and Social Support Specific to an Asian Student Population. *Journal of Psychopathology and Behavioural assessment*. Vol. 17, No. 1.
- Yeung, A. Y. 1980. A study of the adjustment problems anticipated and those actually experienced by international students enrolled at North Texas State University. Unpublished doctoral dissertation. North Texas State University. Denton, Texas.
- Zhang, M. C. 2002. Valuing cultural diversity: the academic adjustment experiences of undergraduate Chinese international business students at Victoria University. Unpublished masters dissertation. Victoria University.
- Zikmund, W. G. 2003. Business Research Methods. 7th ed. Ohio: South-West Publishers.

APPENDIX A

INTERNATIONAL STUDENT ADJUSTMENT QUESTIONNAIRE

Section A: Demographic Information									OFFICE USE ONLY							
RESPONDENT NUMBER:																
Questions		Responses														
1 Type of residence		1 Off campus			2 On campus					V1						
2 Country/region of origin		1 Lesotho	2 Namibia	3 Botswana	4 Other SADC	5 Other African	6 Asia	7 Europe	8 Rest of The world		V2					
3 Gender		1 male		2 female							V3					
4 Age		1 (16-19)	2 (20-25)	3 (26-29)	4 (30-35)	5 (36-39)	6 (40-44)	7 (45-49)	8 50+		V4					
5 Marital status		1 single		2 married							V5					
6 Academic level		1 NC	2 NHC	3 DIPLOMA	4 BTech	5 MTech	6 DTech	7 Exchange Student			V6					
<p>The following is a list of statements about possible adjustment situations that trouble, distress, annoy, or worry students from other countries who are attending the CUT. For each problem select a response that applies to you. You are not being tested. Neither are there right or wrong answers. You should not write your name on the questionnaire. Answer each of the statements by making a cross against your choice according to the given ratings:</p> <p>1= NO PROBLEM; 2= MINOR PROBLEM; 3= MODERATE PROBLEM; 4= MAJOR PROBLEM</p>																
Section B: Social/cultural problems									OFFICE USE ONLY							
7. Suffering from prejudice									1	2	3	4		V7		
8. Racial discrimination									1	2	3	4		V8		
9. Making friends with South African Students									1	2	3	4		V9		
10. Interaction with South African people									1	2	3	4		V10		
11. Finding suitable student activities									1	2	3	4		V11		
12. Finding my way round campus									1	2	3	4		V12		
13. Opportunities for social interaction with South African students									1	2	3	4		V13		
14. Experience of being called a foreigner									1	2	3	4		V14		
15. Finding worship place of my choice									1	2	3	4		V15		

Section C: Academic problems									
16 Getting sufficient personal help from my lecturers	1	2	3	4		V16			
17 Coping with the volume of assignments	1	2	3	4		V17			
18 Coping with assessment methods	1	2	3	4		V18			
19 Participation in class	1	2	3	4		V19			
20. Expressing yourself in English	1	2	3	4		V20			
21. Working in cooperation with South African students	1	2	3	4		V21			
22. Academic advising	1	2	3	4		V22			
23. Grading system	1	2	3	4		V23			
24. Comprehending lectures	1	2	3	4		V24			
25. Getting courses I like	1	2	3	4		V25			
26. Class attendance requirements	1	2	3	4		V26			
27. Library use	1	2	3	4		V27			
Section D: Emotional/personal problems							OFFICE USE ONLY		
28. Feel a sense of helplessness	1	2	3	4		V28			
29. Feeling of alienation (distant from others)	1	2	3	4		V29			
30. Experience loneliness	1	2	3	4		V30			
31 Feeling homesick	1	2	3	4		V31			
32 Dating	1	2	3	4		V32			
Section E Financial problems							OFFICE USE ONLY		
33 Sufficiency of funds to support meet expenses	1	2	3	4		V33			
34 Receiving money from home	1	2	3	4		V34			
35 Unexpected financial needs	1	2	3	4		V35			
36 knowing where to get financial assistance	1	2	3	4		V36			
37 Managing my finances	1	2	3	4		V37			
38 High cost of living in South Africa	1	2	3	4		V38			
Section F: Housing/Residence problems							OFFICE USE ONLY		
39 Finding a place to live during college term	1	2	3	4		V39			
40. Finding suitable place to live during holidays	1	2	3	4		V40			
41. Rooming with students of other nationalities	1	2	3	4		V41			
42. University accommodation	1	2	3	4		V42			
43. Distance from residence to class	1	2	3	4		V43			
Section G: Food problems							OFFICE USE ONLY		
44. Taste of South African food	1	2	3	4		V44			
45. Cost of food	1	2	3	4		V45			

46. Getting food of my choice	1	2	3	4		V46		
47. Adapting to South African food	1	2	3	4		V47		
48. Getting my native food	1	2	3	4		V48		
Section H: Health						OFFICE USE ONLY		
49. Cost of health insurance	1	2	3	4		V49		
50. Obtaining adequate health insurance	1	2	3	4		V50		
51 Access to medical services of choice	1	2	3	4		V51		
52. Adequacy of university health services	1	2	3	4		V52		
53. Getting sufficient exercise	1	2	3	4		V53		
54. Adapting to South African climate	1	2	3	4		V54		
55. Time to rest	1	2	3	4		V55		
56. Availability of personal counselling services	1	2	3	4		V56		
Section I: Immigration problems						OFFICE USE ONLY		
57 Friendliness of Immigration officials	1	2	3	4		V57		
58 Getting visa extensions	1	2	3	4		V58		
59 Feel comfortable visiting immigration office	1	2	3	4		V59		
60 Understanding immigration rules	1	2	3	4		V60		
61 Work restrictions	1	2	3	4		V61		
62 Becoming a citizen of South Africa	1	2	3	4		V62		
SECTION J: International student advisory service						OFFICE USE ONLY		
63. Availability of useful information	1	2	3	4		V63		
64. Helpfulness of international office staff	1	2	3	4		V64		
65. Friendliness of international office staff	1	2	3	4		V65		
66. Adequacy of information at orientation	1	2	3	4		V66		
67. Obtaining assistance with registration	1	2	3	4		V67		
68. Sufficiency of orientation programme	1	2	3	4		V68		
Indicate the degree to which you agree disagree with the statements in the section J below: 1= COMPLETELY DISAGREE; 2= DISAGREE; 3= AGREE; 4= COMPLETELY AGREE								
SECTION K: Student rating of the questionnaire						OFFICE USE ONLY		
69. This procedure of helping identify problem areas is worthwhile	1	2	3	4		V70		
70. Given the insight I have gained from participating in this survey, I will in future agree to participate in focus group discussion on adjustment problems	1	2	3	4		V71		
SECTION K: GENERAL COMMENTS State any problems that you think were not covered in the questionnaire. If there in none say so.								

71. Section B: Social/cultural problems:
72. Section C: Academic problems:
73. Section D: Emotional/personal problems:
74. Section E Financial problems:
75. Section F: Housing/Residence problems:
76. Section G: Food problems:
77. Section H: Health:
78. Section I: Immigration problems:
89. SECTION J: Student rating of the questionnaire:

Thank you for taking part!

DENNIS YAO DZANSI