

**FACTORS INFLUENCING THE USE OF VOLUNTARY COUNSELLING AND TESTING BY  
UNIVERSITY STUDENTS**

by

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**UNIVERSITY OF SOUTH AFRICA**

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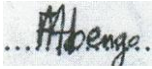
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JUNE 2013

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**DECLARATION**

I declare that **FACTORS INFLUENCING THE USE OF VOLUNTARY COUNSELLING AND TESTING BY UNIVERSITY STUDENTS** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references and that this work has not been submitted before for any other degree at any other institution.



.....

**SIGNATURE**

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# **FACTORS INFLUENCING THE USE OF VOLUNTARY COUNSELLING AND TESTING BY UNIVERSITY STUDENTS**

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## **ABSTRACT**

The study explored the factors influencing the use of voluntary counselling and testing by university students. This was done by undertaking an exploratory and descriptive qualitative study. Focus group discussions and field notes were used to collect data from the participants.

Outcomes from the study revealed various factors to the uptake of Voluntary Counselling and Testing (VCT) services by university students namely: the desire to know one's HIV status, illness, pregnancy, blood donation, to get a reward, the influence of significant others, the influence of media, awareness campaigns, compulsion, to get a job, curiosity, to be a positive role model and the positive attitude and professional conduct of the health care provider. The study also revealed various challenges to the uptake of VCT services by university students namely: the fear of being diagnosed HIV positive, HIV/AIDS-related stigma and discrimination, the low perception of risk to HIV infection, the lack of student friendly VCT services, the shortage of human and infrastructural resources, the inaccessibility of VCT services, the long waiting period for test results, negative perceptions about VCT, the problems with pre-test counselling and ignorance. Going by the participants' suggestions VCT services uptake by university students could be improved by increased resource allocation (incentives, human and infrastructural resources), increased awareness campaigns, and improved counselling and making VCT services more accessible.

### **Key concepts**

AIDS; HIV; HIV testing; university student; voluntary counselling.

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## List of Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral treatment
EFA	Education for All
FGD	Focus Group Discussion
HEAIDS	Higher Education HIV and AIDS Programme
HIV	Human Immunodeficiency Virus
IRB	Institutional Review Board
MARPs	Most-at-risk populations
MSM	Men who have sex with men
PHD	Doctor of Philosophy
PLWHIV	People living with HIV
SANAC	South African National AIDS Council
SARUA	Southern African Regional Universities Association
SSA	Sub-Saharan Africa
STATSSA	Statistics South Africa
STI	Sexually Transmitted Infections
TB	Tuberculosis
UNISA	University of South Africa
USAID	United States Agency for International Development
UNAIDS	Joint United Nations Programme on HIV/AIDS
VCT	Voluntary Counselling and Testing
WHO	World Health Organization

## **List of Annexures**

Annexure A: Research Clearance Certificate from UNISA Ethics Committee

Annexure B: Letter to the University of Free State asking permission to conduct the study

Annexure C: Permission Letter from University of Free State

Annexure D: Interview Schedule

Annexure E: Consent Form

Annexure F: Field notes: an example

Annexure G: Interview Script: Focus Group A

## **CHAPTER 1**

### **OVERVIEW OF THE STUDY**

#### **1.1 INTRODUCTION**

University students are predominantly vulnerable to HIV/AIDS due to their high-risky behaviours such as high number of sexual partners, use of drugs or alcohol and having unprotected sex with sex workers (Njagi & Maharaj 2006:114; UNAIDS 2008:67). Despite the availability of Voluntary, Counselling and Testing (VCT) services in the majority of South Africa's universities, most university students are still unaware of their HIV status (Matovu & Makumbi 2007:1319). With university students at the centre of the HIV epidemic and vulnerable to HIV infection, it is necessary to explore factors influencing the use of VCT by university students (Peltzer, Nzewi & Mohan 2004:98). This study therefore aimed at investigating the factors influencing VCT services usage by university students in order to identify the possible barriers and enhancers of such services in this group.

#### **1.2 SOURCE AND BACKGROUND OF THE PROBLEM**

The HIV/AIDS prevalence rate in South Africa remains the highest at a global scale. This is despite the different approaches implemented to slow down its spread and to minimise its impact on individuals, family and society. The epidemic continues to be most severe in Sub-Saharan Africa (SSA), with South Africa having more people living with HIV/AIDS (an estimated 5.6 million) than any other country in the world (UNAIDS 2011:7).

A worrying trend in South Africa is that the HIV/AIDS prevalence is highest among the adolescents and young adults. The majority of HIV/AIDS transmissions in this age group are mainly through unprotected sexual intercourse (Zenilman 2007:817). The mortality rate has also taken its toll among adolescents and young adults. Under normal circumstances, mortality rates should be highest among young children and elderly adults, but today in South Africa the mortality rate is 71 percent among the people in the age group 15–49 year olds (Dorrington, Johnson, Bradshaw & Daniel 2006:11).

South Africa's future looks bleak if the current HIV/AIDS trends are not reversed. The future of a country lies in its youths and young adults who are its future leaders. Many people are now dying during their reproductive and prime working years. This has negative implications on the country's population size and its socio-economic development. There is a need to develop effective prevention measures such as VCT in order to reduce the spread of the HIV/AIDS epidemic in this age group (Mermin, Bunnell, Lule, Opio, Gibbons, Dybul & Kaplan 2005:962).

The HIV & AIDS and STI Strategic Plan for South Africa 2007-2011 seeks to improve HIV screening and diagnosis through VCT among the 15-49 age group, ensuring early diagnosis for HIV/AIDS exposed infants as well as to increase the geographical access and uptake of VCT services (Department of Health 2006:5). Despite this progress, most South Africans are still unaware of their HIV/AIDS status. It is estimated that only 10 percent of South Africans know their HIV/AIDS status (Naidoo 2006:2). This has negative consequences on South Africa's effort to fight the HIV/AIDS epidemic.

Though South Africa has introduced the strategic plan to fight the pandemic, there are many barriers that influence HIV/AIDS testing among individuals. Peltzer et al (2004:97) argue that stigmatising attitudes towards people with HIV/AIDS may reduce people's willingness to have themselves tested for HIV/AIDS thereby increasing the risk of transmission. Furthermore, these attitudes lead to those with known HIV/AIDS infections to be socially isolated. Bwambale, Ssali, Byaruhanga, Kalyango and Karamagi (2008:263) established that HIV/AIDS-related stigma created barriers towards seeking VCT among men in Uganda. The fear of stigmatisation is a barrier to HIV testing and has negative consequences for HIV/AIDS prevention and treatment in South Africa (Meiberg, Bos, Onya & Schaamal 2008:53). Other identified barriers to VCT are fear of undesirable consequences, like discrimination, and concerns about confidentiality (Vajpayee, Mojumdar, Raina, Mishra & Sreeinvas 2009:826).

The other barriers to HIV testing include fear of testing HIV positive, lack of information and ignorance about the transmission, diagnosis, prevention, associated symptoms, disease as well as management of HIV/AIDS, low self-perceived risk to HIV/AIDS, costs of HIV testing and accessibility of HIV testing (Angotti, Gaydos, Kimchi, Watkins & Yeatman [s.a.]:18; Botma, Motiki & Viljoen 2007:49; Manirankunda, Loos, Alou,

Colebunders & Nöstlinger 2009:589). Lack of awareness, knowledge and benefit of VCT is also another barrier of seeking VCT services (Charles, Kweka, Mahande, Barongo, Shekalaghe, Nkya, Lowassa & Mahande 2009:128). In addition, other known obstacles to HIV testing include: the inadequacy of VCT centres, religious beliefs, cultural beliefs, parental pressure and inadequate motivation (Yahaya, Jimoh & Balogun 2010:141). The lack of youth-friendly services and the distance of the nearest VCT are also barriers to HIV testing (Ireru, Tumuti, Mathuvi, Njagi, Piero, Gatumu, Njagi & Karugu 2012:4).

Apart from barriers to VCT, there are many reported facilitators to screening such as health complaints, reconfirm previous HIV-test, pregnancy, marriage, new relationship, having had unsafe sex and the availability of medication to treat HIV positive people that motivate people towards seeking HIV testing (Meiberg et al 2008:53; Sivaram, Saluja, Das, Reddy & Yeldandi 2008:436). Perceived susceptibility towards contracting HIV/AIDS and the belief that VCT leads to better health care are also associated with willingness towards seeking VCT (Abebe & Mitikie 2009:152; Yahaya et al 2010:139). The other factors associated with willingness towards seeking VCT include: the desire to know one's HIV status, the encouragement from friends, the hope of receiving incentives, concern for one's own health, marital aspirations and the prerequisite for entering a long term relationship (Chirawu, Langhang, Mavhu, Pascoe, Dirawo & Cowan 2010:85; Kabiru, Luke, Izugbara & Zulu 2010:412; Njagi & Maharaj 2006:121). A history of sexual risky behaviours and the HIV-positive status of a spouse are reported factors associated with willingness towards seeking VCT (Vajpayee et al 2009:828).

University students have been identified as particularly vulnerable to HIV/AIDS due to their high-risky behaviours such as a high number of sexual partners, use of drugs or alcohol and having unprotected sex with sex workers (Njagi & Maharaj 2006:114; UNAIDS 2008:67). With university students at the centre of the HIV epidemic and vulnerable to HIV infection, it is necessary to explore factors influencing the use of VCT by university students (Peltzer et al 2004:98). Thus the study sought to explore factors influencing the use of VCT by university students.

### **1.3 PROBLEM STATEMENT**



VCT services at the University of Free State, QwaQwa campus are being offered by the university's clinic as part of the university campus HIV/AIDS programme. The VCT services are freely offered to both staff and students. There is one nurse employed at the clinic to provide VCT services. The researcher observed that very few university students at the campus are utilising the university's VCT services. The availability of VCT services at the university does not guarantee utilisation by university students.

Understanding the limited uptake of VCT on campus, particularly among students, is an important issue. With university students of the University of Free State, QwaQwa campus at the centre of the HIV/AIDS epidemic, it is important to explore factors influencing the use of VCT services. The researcher therefore conducted the study with the following problem statement (stated in interrogative form) in mind:

#### **1.4 RESEARCH QUESTION**

What factors influence the use of VCT services by university students?

#### **1.5 PURPOSE OF THE STUDY**

The purpose of the study was to explore factors influencing the use of VCT services by university students in order to identify the possible barriers and enhancers of such services in this group.

##### ***1.5.1 Research objectives***

In line with the purpose of research study, the research objectives for this study were to:

- Explore and describe factors which influence the use of VCT services by the university students.
- Develop strategies to improve the uptake of VCT by the university students.

#### **1.6 DEFINITIONS OF TERMS**

This section defines the key terms used in the study namely: factor, university student, Voluntary Counselling and Testing (VCT), Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS).

### **1.6.1 Factor**

Factor refers to one of several things that cause or influence something (*Oxford Advanced Learner's Dictionary of Current English International Student's Edition* 2010:526). In this study factor refers to one of the several things that cause or influence VCT.

### **1.6.2 University student**

University student refers to a student studying at a university or college (*Oxford Advanced Learner's Dictionary of Current English International Student's Edition* 2010:1484). In this study university student refers to a registered student studying at the University of Free State, QwaQwa campus.

### **1.6.3 Voluntary Counselling and Testing (VCT)**

VCT is the process through which clients are counselled about their risk for acquisition or transmission of HIV, informed about the risks and benefits of testing; clients who consent are tested and appropriate support provided together with the test result (Naidoo 2006:2).

### **1.6.4 Human Immunodeficiency Virus (HIV)**

HIV is the virus that causes AIDS (South African National AIDS Council (SANAC) 2010:6).

### **1.6.5 Acquired Immune Deficiency Syndrome (AIDS)**

AIDS is the stage at which an individual's immune system is weakened by HIV to the point where they develop a number of diseases, which are collectively known as opportunistic infections (SANAC 2010:5).

## **1.7 PARADIGMATIC PERSPECTIVE OF THE STUDY**

A qualitative research paradigm was used to conduct this study. Qualitative research is a means of exploring the depth, richness and complexity inherent in phenomena (Burns & Grove 2005:61; Polit & Beck 2008:21). Qualitative research paradigm was suitable for this study in order to obtain the multiple realities of factors influencing the use of VCT by university students (Fouche & Delport 2005:74; Streubert-Speziale & Carpenter 2007:21). Qualitative research paradigm utilises flexible and unstructured methods of inquiry which helped to get more insights of factors influencing the use of VCT by university students (Polit & Beck 2008:17).

## **1.8 RESEARCH DESIGN**

An exploratory, descriptive and contextual qualitative study was used to conduct this study. Qualitative research is helpful for exploring issues regarding people's views towards a specific topic or phenomenon (Polit & Beck 2008:21). It allowed the researcher to undertake a detailed evaluation of the problem, and reached the "roots" of the problem (De Vos 2005:335). In addition, qualitative research allowed for open-ended and inductive exploration of the phenomenon being studied since little is known about factors influencing the use VCT by the university students (MacPhail, Pettifor, Moyo & Rees 2009:457; Terre Blanche, Durkheim & Painter 2006:272).

## **1.9 RESEARCH METHODOLOGY**

This section discusses the aspects of the research methodology used in the study. The aspects of the research methodology discussed include the research population, the sampling method, sample size, data collection method and data analysis.

### **1.9.1 Research population**

The research population refers to all elements (individuals, events and circumstances) that meet the sampling criteria for inclusion into the study (Burns & Grove 2005:806). The research population for the study was all students enrolled at the University of Free State, QwaQwa campus for the 2012 academic year, for either undergraduate or

postgraduate studies. To be eligible for inclusion into the study, individuals complied with the following eligibility criteria:

- Fully registered student of the University of Free State, QwaQwa campus for the 2012 academic year, for either undergraduate or postgraduate studies.
- Participants were 21 years and above.
- Participants were willing to give consent.

#### **1.9.1.1 *Sampling method***

A purposive sampling method was used to collect data and to select a sample on the basis of knowledge of the population, its elements, and purpose of the study (Babbie 2007:118). In addition, purposive sampling method helped the researcher to select participants who were aware of the VCT services.

According to Burns and Grove (2009:363), effective recruitment of subjects is crucial to the success of a study. The participants were recruited with the help of the campus director of residences and the student representative council. The campus director of residences and the student representative council acted as gatekeepers to access the university students. Gatekeepers are people who have a say over who is let in and who is not to access the study participants (Terre Blanche et al 2006:312). The campus director of residences and the student representative council gave permission to conduct the study. They also, gave announcement about the study to the students, organised the venue, and arranged students for the study.

#### **1.9.1.2 *Sample size***

Focus group interviews and field notes were used to collect data for this study. The sample size and the number of focus groups for this study were not predetermined. The focus group interviews were conducted until no new data emerged and redundancy was achieved (Polit & Beck 2008:351; Streubert-Speziale & Carpenter 2007:95).

#### **1.9.2 *Data collection***

This section discusses the aspects of data collection namely: the data collection method and the data collection process.

### ***1.9.2.1 Data collection method***

Focus group discussions (FGDs) and field notes were used to collect data from informants. FGDs were used in order to enable informants to verbalise their views towards VCT (Greeff 2005:293). An interview guide, comprising of the open-ended questions was used to conduct the FGDs. The open-ended questions helped participants to talk freely about their views towards VCT. The open-ended questions were followed by specific probing questions. Specific probing questions were used to dig deeper into the participants' responses to open-ended questions. The interviews were flexible and took the direction indicated by the participants. The researcher was the primary instrument for both collecting and analysing data (Terre Blanche et al 2006:276).

### ***1.9.2.2 Data collection process***

A therapeutic environment and a relationship of trust were established with participants before commencement of the focus group interviews. Each focus group consisted of eight to ten members. The interviews took approximately one hour for each group. While the interviews were in progress, the researcher took field notes about seating arrangements of participants, the order in which people were speaking to aid voice recognition, non-verbal behaviour of participants, themes that were striking as well as personal thoughts, ideas, hunches and impressions. The interviews were audio-taped in order to capture the participants' original accounts of their views towards VCT. Repeated focus group interviews for each group were continued until no new or relevant data emerged. Participants were not paid for participating in the group discussion, instead they were provided with some refreshments during the FGDs. Participants were debriefed upon completion of the focus group interviews. The researcher left his details to participants to contact him at a later stage if they had anything to discuss related to the study. Debriefing helped the researcher to discover any problems generated by the research experience so that those problems can be resolved.

### **1.9.3 Data analysis**

Thematic analysis was used to analyse data. Thematic analysis involves sorting the data into particular themes, categories and patterns (De Vos 2005:337; Babbie 2007:384). Data from the audiotapes were transcribed verbatim and coded into themes, categories and patterns. The emerging themes, categories and patterns were then analysed. The research findings were considered in dialogue with literature and current research in order to offer critique, possible applications, and further directions of research and to enhance rigour of the study.

## **1.10 TRUSTWORTHINESS OF THE STUDY**

Qualitative researchers are concerned with enhancing the trustworthiness of a study. Streubert-Speziale and Carpenter (2007:49) have described the following criteria for trustworthiness namely: credibility, dependability, confirmability and transferability.

### **1.10.1 Credibility**

A qualitative study is credible when it presents an accurate description or interpretation of human experiences as lived or experienced by the participants. The researcher made use of prolonged engagement with the participants during data collection and with data during data analysis, and member checking in order to enhance the credibility of the study (Polit & Beck 2008:545; Streubert-Speziale & Carpenter 2007:380).

### **1.10.2 Dependability**

Dependability is the alternative to reliability, in which the researcher attempts to account for changing conditions in the phenomenon chosen for the study and changes in the design created by increasingly refined understanding of the study (De Vos 2005:346). The researcher ensured that dependability was achieved by applying the credibility of the study (Streubert-Speziale & Carpenter 2007:49). The raw and analysed data was evaluated by a peer reviewer, namely the supervisor in order to enhance the dependability of the study (Polit & Beck 2008:548). The researcher established an audit trail, which is the recording of activities over time that another individual can follow in order to judge the study for its dependability.

### **1.10.3 Confirmability**

Confirmability refers to the extent to which research results are a product of the focus of the study and not the biases of the researcher. The researcher made use of an inquiry audit, audit trail, direct observation and interaction with participants in order to enhance confirmability of the study (Polit & Beck 2008:548).

### **1.10.4 Transferability**

Transferability refers to whether the findings of a qualitative study can be applied to another context (De Vos 2005:346). The researcher made use of rich descriptions, information-rich participants and conducted data collection until data saturation occurred in order to enhance transferability of the study.

## **1.11 ETHICAL CONSIDERATIONS**

This section discusses the ethical principles used in the study namely; protecting the rights of participants, protecting the rights of institutions, scientific integrity/honesty on the part of the researcher and maintaining an ethical researcher-participant relationship.

### **1.11.1 Protecting the rights of the participants**

The participants were provided with adequate information needed to make reasoned decision about their participation in the study. Such information included the purpose of the study, its methods, risks and benefits. The researcher requested participants to sign a consent form in order to document their voluntary and informed participation. The participants took part in the study voluntarily and were informed that they may withdraw their participation from the study at any time without penalties. The participants' responses were kept confidential and their identity remained anonymous in presentations, reports and publications of the study. Participants were debriefed upon completion of the focus group interviews. The researcher left his details to participants to contact him at a later stage if they had anything to discuss related to the study. Debriefing helped the researcher to discover any problems generated by the research experience so that those problems can be corrected.

### **1.11.2 Protecting the rights of the institutions**

The researcher received an ethical clearance from the UNISA Department of Health Higher Degree Ethical committee after submitting his research proposal prior to data collection (see Annexure A). The committee served as an Institutional Review Board (IRB) to protect the rights of the institution to which the research was conducted against potential legal implications of neglecting to address important ethical issues of the study. Permission was also asked and obtained from relevant authorities of the University of Free State to conduct the study at the university (see Annexures B and C).

### **1.11.3 Scientific integrity/honesty on the part of the researcher**

The research findings were considered in dialogue with literature and current research in order to offer critique, possible applications, and further directions of research and to enhance rigour of the study. The researcher created an accurate, objective, clear, unambiguous account of the study. All forms of emphasis and slanting to bias the study were avoided by the researcher. The study's shortcomings were acknowledged in order to enhance scientific integrity of the study.

### **1.11.4 Maintaining an ethical researcher-participant relationship**

A collaborative partnership was established and maintained between the researcher and the participants. The researcher respected participants' values, beliefs, culture and tradition. The research findings were made available to the participants in order to empower them.



## **1.12 SCOPE AND LIMITATIONS OF THE STUDY**

Data was collected only at the University of Free State, QwaQwa campus. Some of the students ignored to participate in the study due to lack of knowledge of the VCT services. University students attended classes at the different sessions and this deterred their attendance of focus group discussions. A small sample of university students was used for this study.

## **1.13 STRUCTURE OF THE DISSERTATION**

Chapter 1: Overview of the study

Chapter 2: Research design and research method

Chapter 3: Literature review

Chapter 4: Research findings and literature control

Chapter 5: Conclusion, limitations and recommendations

## **1.14 CONCLUSION**

This chapter outlined the research problem, the research question, the purpose, the objectives, the paradigmatic perspective, the research design and the methodology of the study. In addition, it described the trustworthiness, ethical considerations, the scope and limitations of the study. The next chapter discusses the methodological aspects of the study.

## CHAPTER 2

### RESEARCH DESIGN AND METHODOLOGY

#### 2.1 INTRODUCTION

This chapter discusses the methodological aspects used to conduct the study. These include the research design, sampling technique, data collection and analysis. This chapter also discusses measures for ensuring trustworthiness and ethical considerations undertaken during the study.

#### 2.2 RESEARCH DESIGN

A research design involves working out a specific technique of following through a research question or set of questions in relation to a set of data. It refers to the researcher's overall plan for answering research questions. A research design is a plan which determines how and why a study is going to be conducted (Babbie 2007:87). According to Hartas (2010:60), a research design is a strategy for addressing a specified research question or concern. It is perhaps more useful, then, to conceptualise research design as an approach to thinking through research topics. An exploratory, descriptive and contextual qualitative research was followed in conducting this study. The characteristics of the design utilised by the researcher in this study will now be discussed in detail in the following sub-headings:

##### 2.2.1 Qualitative aspect of the design

Qualitative research is a systematic, interactive subjective approach used to describe and give meaning to life experiences (Burns & Grove 2005:747). It is concerned with the understanding of the meaning of social interactions by those involved in the study. Qualitative research is interpretive, which means that truth is obtained from the insider perspective (Holloway 2005:5). In order to explore the meanings that university students attached to VCT it was necessary to interview them in order to obtain first-hand information of their views concerning VCT.

According to Holloway (2005:4), qualitative research gives priority to obtaining and analysing textual data. The importance of textual data is that it allowed university students to express their views on VCT in their own words and on their own terms. The qualitative approach is the one most suited to studying the phenomenon of disclosure, because the information gathered in qualitative studies is in the form of narrative descriptions which may help to gain deep understanding of human experiences (Polit & Beck 2008:56).

Qualitative research is particularly relevant to the new public health, given its emphasis on the need to both describe and understand people (Liamputtong 2005:4). Thus qualitative research helped the researcher to obtain the students' reasons for utilising and not utilising VCT services.

The product of qualitative research is usually a narrative report with rich description (vivid and detailed writing), rather than a statistical report (Johnson & Christensen 2008:388). Since the researcher was examining students' views towards VCT, which is subjective, he conducted a qualitative study.

### **2.2.2 Exploratory aspect of the design**

De Vos and Fouche (2005:106) have described exploratory studies as scholarships used to gain insight into situations, phenomena, communities and persons. The need for exploratory research usually arises out of a lack of basic information on an area of interest, or in order to get acquainted with a situation so as to formulate a problem or develop a hypothesis. Qualitative methods are often useful as an exploratory phase of research. Liamputtong (2005:4), for example, asserts that qualitative data analysis is particularly essential when the researchers have little knowledge about the area of investigation and where the social contexts of people's lives is of critical significance.

Exploratory studies are essential whenever a researcher is breaking new ground, and they yield new insights into a topic for research (Babbie 2007:89). Qualitative methods are useful for exploring the full nature of little-understood phenomena (Polit & Beck 2010:22). Since little is known about the factors influencing the use VCT by university students it was necessary to conduct an exploratory study (MacPhail et al 2009:457).

### **2.2.3 Descriptive aspect of the design**

Descriptive studies are those used to describe situations and events (Babbie 2007:89). In descriptive studies, the researcher observes and then describes what has been observed. The description of phenomena is an important purpose of research. Descriptive research presents a picture of the specific details of a situation, social setting or relationship, and focuses on “how” and “why” questions (De Vos & Fouche 2005:106). The researcher, therefore, begins with a well-defined subject and conducts research to describe it accurately, whereas in exploratory studies, the researcher aims to become conversant with basic facts and to create a general picture of conditions. In descriptive qualitative studies, researchers describe the dimensions, variations, and importance of phenomena. According to Yin (2012:49), descriptive study can offer rich and revealing insights into the social world of a particular phenomenon.

A descriptive character of design was therefore suitable for this research because the study aimed to describe the factors influencing the use of VCT by university students. The description of the factors influencing the use of VCT by university students helped to illustrate in detail the influence of these factors on VCT usage by university students.

### **2.2.4 Contextual aspect of the design**

Qualitative research is always context specific. The context is the cultural, temporal, and physical/geographical setting in which the research occurs (Holloway 2005:275). Writing about qualitative research work should include this context so that the reader too can grasp the whole picture and does not merely receive a disembodied and context-free text or a description of data that have no connection or link to a storyline.

In addition, the story of a qualitative research project can only unfold if the researcher takes the context into account. Locality, temporality and culture should be reflected in the write-up. Thus the researcher sets the scene for developing an interesting story. Time, culture and history are different and affect the beliefs and assumptions of the society and hence research. Group membership, locality or gender influence interaction, assumptions and experience of participants, and therefore thick description is needed. According to Holloway (2005:275), a qualitative research account without contextualisation is lifeless.

Qualitative researchers believe that social reality is complex and dynamic, thus it can be found only by studying persons as they interact with or within their socio-historical settings. As a result qualitative researchers believe that multiple realities exist in view of the uniqueness of people, their circumstances and their personal interpretations. Qualitative researchers tend to emphasise the dynamic, holistic, and individual aspects of the phenomena and attempt to capture those aspects in their entirety, within the context of those who are experiencing them (Polit & Beck 2010:18).

Once the factors influencing the use of VCT services by university students were described it was important to contextualise the findings. Contextualisation is critical for understanding the reality of informants. In this study, the findings are understood within the context of students enrolled at the University of Free State, QwaQwa campus.

## **2.3 RESEARCH METHODS**

Research methods focus on specific ways or strategies used to understand social reality (Hartas 2010:17). This section discusses the aspects of the research methods of the study.

### **2.3.1 Population and sampling**

This section discusses the aspects of the research population and sampling technique used in this study.

#### ***2.3.1.1 Population***

Research population is a group of individuals or organisations that share the same characteristic that is of interest to the study (Hartas 2010:67). According to Polit and Beck (2008:237), a population is defined as the entire aggregation of cases in which the researcher is interested; it may be as narrow as possible or may be broadly defined. Burns and Grove (2009:343) have differentiated between the target and the accessible population. The target population is the entire set of individuals or elements who meet the sampling criteria. An accessible population is the portion of the target population to which the researcher has reasonable access. The target population for the study was all

students enrolled at the University of Free State, QwaQwa campus for the 2012 academic year who were 21 years old and above. The researcher had reasonable access to mostly first, second and third year students.

### **2.3.1.2 Criteria for inclusion**

The eligibility criteria, also referred to as sampling criteria, includes a list of characteristics essential for membership or eligibility in the target population (Burns & Grove 2009:344). To be eligible for inclusion in this study, individuals had to comply with the following eligibility criteria:

- Participants were enrolled at the University of Free State, QwaQwa campus for the 2012 academic year, for either undergraduate or postgraduate studies.
- Participants were 21 years and above.
- Participants were willing to give consent.

### **2.3.1.3 Sampling technique**

Once the population is defined, a sample is selected. A sample is a section or subgroup of the population the researcher intends to study (Hartas 2010:67). Sampling is the process of selecting a portion of the population to represent the entire population so that inferences can be drawn (Polit & Beck 2008:338). Sampling in qualitative research is not concerned with ensuring that findings can be statistically generalised to the whole population (Liamputtong 2005:42). In qualitative research, a sample will aim to identify the cases that will provide a full and sophisticated understanding of all aspects of a phenomenon, and to select information-rich cases for studying in depth. Qualitative research seeks to identify key individuals, events or settings which provide a rich source of data (Gerrish & Lacey 2006:181).

There are two main approaches to sampling: probability and non-probability approaches. In probability sampling, every element in the population has an opportunity to be included in the sample. According to Hartas (2010:67), probabilistic sampling involves a random selection to ensure that all participants or units of an analysis have an equal opportunity to be chosen from the target population. In non-probability sampling, not every element of the population has an opportunity to be included in the

sample (Burns & Grove 2009:353). The non-probability sampling approach is used in qualitative studies, as it does not aim to produce a statistically representative sample or draw statistical inferences. The aim is not to generalise the distribution of the experiences or processes, but to generalise the nature and interpretive processes involved in the experiences. In addition, non-probability sampling approach tends to rely on the availability and accessibility of informants (Babbie 2007:183). The non-probability approach was used to select informants for this study, using the purposive sampling technique.

The purposive sampling technique was used in this study in order to obtain information-rich informants and to select a sample on the basis of knowledge of the population, its elements, and purpose of the study (Babbie 2007:118). According to Hartas (2010:69), purposive sampling is a sampling technique with a purpose. A purposive sample of university students enrolled at the University of Free State, QwaQwa campus was selected for this study. The criteria for the sample were three-fold, namely: (1) students were enrolling at the University of Free State, QwaQwa campus for the 2012 academic year, (2) were 21 years and above, and (3) were willing to give informed consent. In purposive sampling, the researcher specifies the characteristics of a population of interest and then tries to locate individuals who have those characteristics (Johnson & Christensen 2008:239). Once the group was located, the researcher invited those who met the inclusion criteria to participate in the research study. Purposive sampling technique helped the researcher to select informants who were able to provide important information about factors influencing the use of VCT by university students.

Undergraduate and postgraduate students were purposefully selected for the study. The informants were recruited with the help of the campus director of residences and the student representative council. The campus director of residences and the student representative council acted as gatekeepers to access the university students. Gatekeepers are people who have a say over who is let in and who is not to access the study informants (Terre Blanche et al 2006:312). The campus director of residences and the student representative council gave announcement about the study to the students and organised the venue for the study.

The size of a sample depends on the nature and purpose of inquiry. In qualitative research, it is difficult to predict accurately what the sample size will be like. Qualitative

studies tend to involve a small number of informants to collect in-depth and contextualised information about the social phenomena (Hartas 2010:71). The focus is on the quality of information obtained from the person, situation, event, or documents sampled versus the size of the sample (Burns & Grove 2009:361). Thus, the sample size required is determined by the depth of information that is needed to gain insight into a phenomenon. The number of informants in a qualitative study is adequate when saturation of information is achieved in a study area. Saturation of data occurs when additional sampling provides no new information, only redundancy of previously collected data. Here data is collected and analysed until no new themes or perspectives are reported and it is assumed that all the component parts of the phenomenon under study have been captured (Gerrish & Lacey 2006:184). In this study, the sample was large enough when the researcher was satisfied that the data collected covered all aspects of the factors influencing VCT usage by university students.

### **2.3.2 Methods of data gathering**

Data collection is a precise and systematic gathering of information which is relevant to the research purpose, objectives and questions (Burns & Grove 2005:539). In this study focus group discussions and field notes were used to collect data from the participants.

#### ***2.3.2.1 Focus group discussion (FGD)***

A focus group discussion (FGD) was used to collect the data from the informants. FGD is a carefully planned discussion designed to obtain the informants' perceptions in a focused area in a setting that is permissive and non-threatening (Burns & Grove 2009:513; Greeff 2005:30). According to Johnson and Christensen (2008:209), a focus group is a type of group interview in which a moderator leads a discussion with a small group of individuals to examine, in detail, how the group members think and feel about a topic. The FGD is also called group interviewing (Babbie 2007:308). It is called a "focus" group because the moderator keeps the individuals in the group focused on the topic being discussed. The role of the group moderator is to lead and facilitate the focus group discussion (Holloway 2005:65).

FGDs are particularly useful when the researcher wishes to explore people's talk, experiences, opinions, beliefs, wishes and concerns (Holloway 2005:57). The method is



particularly useful for allowing informants to generate their own questions, frames, and concepts and to pursue their own terms, in their own vocabulary. Liamputtong (2005:73), maintain that FGDs provide a rich and detailed set of data about perceptions, thoughts, feelings, and impressions of people in their own words. In addition, FGDs are very useful for providing in-depth information in a relatively short period of time (Johnson & Christensen 2008:210). FGDs are thought to be most useful when the topic of inquiry is considered sensitive (Streubert-Speziale & Carpenter 2007:39).

FGDs were suitable for this study in order to enable informants to verbalise their thoughts and feelings towards VCT. One of the assumptions underlying the use of focus groups is that group dynamics can help people to express and clarify their views in ways that are less likely to occur in a one-to-one interview. The group may give a sense of “safety in numbers” to those wary of researchers or those who are anxious. The FGDs also allowed the researcher to question several participants systematically and simultaneously (Holloway 2005:353).

The researcher was the primary instrument for data collection and analysis in this study. The researcher in qualitative research is the primary instrument of data collection and analysis (Litchman 2009:16). Qualitative research encourages involvement, as the researchers frequently design the study and collect, interpret and report the data themselves (Gerrish & Lacey 2006:165). In qualitative research, the researcher as whole is totally involved – perceiving, reacting, inter-acting, reflecting, attaching meaning, and recording (Burns & Grove 2009:508). A tape recorder was used to capture the content of the FGDs.

The FGDs were conducted without utilising any of the researcher’s prior information, experience or opinions in a particular area (Greeff 2005:292). In this study, the researcher asked the participants a *grand tour* question entitled: **What factors influence the use of VCT by university students?** Subsequent probing questions were then asked in order to dig deeper into the factors influencing VCT usage by university students (Burns & Grove 2009:405). A probe is a follow-up question that aims to elicit information to fill in the blanks in informant’s first response to a question (Liamputtong 2005:61).

The number of focus groups used in this study was not pre-determined (Terre Blanche et al 2006:372). The researcher recruited appropriate informants for each of the focus groups. Recruiting appropriate informants for each of the focus groups is critical, because recruitment is the most common source of failure (Burns & Grove 2009:513). The group members were purposefully selected because they provided the kind of information of interest to the researcher (Johnson & Christensen 2008:210). The focus groups were representative of both male and female students in order to obtain the perspective of each gender towards VCT. The researcher sorted the informants into focus groups with common characteristics. The process of sorting informants into focus groups with common characteristics is called segmentation (Burns & Grove 2009:514). Selecting informants who are similar to each other in lifestyle, or experiences, views, and characteristics facilitated more open discussion. A focus group is usually homogeneous because the use of a homogeneous group promotes discussion (Johnson & Christensen 2008:210). The researcher conducted the focus group interviews in each group. The focus group interviews took approximately one hour for each group.

The FGDs took four weeks to complete. The first week was spent gaining access to the target population, making initial contacts with informants and conducting the pilot interview. During the initial contacts, issues relating to the purpose of the study, informed consent and ethical considerations such as voluntary participation were discussed. Informants were given the opportunity to ask questions regarding the study at each contact.

Informants were contacted by the researcher the day before the focus group interviews to check if they were still available for the interviews and to obtain further verbal consent. The focus group interviews took place in comfortable and relaxed venue in order to ensure comfort and privacy. The focus group sessions took place in students' residences since the residences were easily accessible to the potential informants as alluded to by Holloway (2005:63) that it helps to hold focus group sessions in a place easily accessible to potential informants and familiar to them.

Repeated focus group interviews were continued until no new or relevant data emerged. In total five focus groups were conducted at the end of the study. The first three groups

comprised a mixture of male and female students. The fourth and fifth groups comprised of male and female students respectively.

#### ***2.3.2.1.1 Use of communication techniques during FGDs***

The researcher led the focus group discussions. According to Johnson and Christensen (2008:210), the group moderator must have good interpersonal skills, and he or she must know how to facilitate group discussions. Before the commencement of the interview, the researcher introduced himself to the informants, welcomed and thanked informants for being present. The researcher maintained eye contact with all the informants. The researcher explained to the informants the purpose of the study and informed them of their right to withdraw from the study at any time. According to Holloway (2005:65), the facilitator should explain that the aim of focus groups is to encourage people to talk to each other rather than to address themselves to the researcher. The researcher asked informants to sign consent forms. The researcher let informants introduce themselves to one another in order to establish a therapeutic environment. Informants were informed of the availability of a student counselling facility at the university should they find the interviews provoking feelings of anxiety or distress.

The researcher encouraged all informants to be involved in the group discussions in order to prevent few members to dominate the discussions. Disagreements within groups were used to encourage informants to elucidate their point of view and clarify why they think as they do (Holloway 2005:65). According to Johnson and Christensen (2008:210), the group moderator must know when to probe for more information and know when the discussion about a particular topic has been exhausted.

At the end of the interview, informants were thanked. The researcher allocated time for individual conversations with informants in order to maintain a relationship of trust.

#### ***2.3.2.1.2 Field notes***

The data collected during the focus group discussions was supported by field notes, which were used as part of the data analysis. While the focus group interviews were in progress, the researcher took field notes. Field notes are jotted notes of what transpires

during the focus group discussions (Babbie 2007:309). The field notes described the unstructured observations made during the discussions as well as the interpretation of these observations. The observations included the seating arrangements of informants, the order in which informants spoke to aid voice recognition, non-verbal behaviour of informants such as eye contact, posture, gestures, between group members, crying and fidgeting, themes that were striking as well as personal thoughts, ideas, hunches and impressions. The field notes highlighted as much of the conversation as possible. The importance of field notes was that they aided the researcher in focusing on group dynamics which was important in the analyses of data since the strength of focus groups lie in the process of sharing and comparing among the informants (Botma et al 2007:51). The field notes helped the researcher to focus on the group dynamics important in analysing data (Polit & Beck 2008:406).

#### ***2.3.2.1.3 Pilot study***

A pilot study is a small study conducted prior to the actual study to determine whether the methodology, interview, sampling, instruments and analysis are adequate and appropriate (Strydom 2005:206). The researcher conducted one pilot focus group interview before commencing the actual focus group interviews. The pilot focus group consisted of selected few students at the university. The pilot interview helped the researcher to identify deficiencies in the researcher's interviewing skills; checked if the interview questions were appropriate, checked whether the tape recorder used during focus group interviews was in working condition; estimated the probable length of focus group interviews; and pre-empted any logistical problems that could potentially arise during the main focus group interviews. In addition, the pilot study helped the researcher to determine the feasibility of the study, to identify problems with the study design, to determine the effectiveness of the sampling technique, to develop and refine data collection instruments and to try out data analysis techniques (Burns & Grove 2009:44).

### **2.3.3 Methods of data analysis**

Quantitative data analysis follows formulas and rules while, at the core, qualitative analysis is a creative process, depending on the insights and conceptual capabilities of the researcher. Data analysis involves working through a conceptual problem in relation

to a set of data (Hartas 2010:55). According to Terre Blanche et al (2006:322), qualitative data analysis involves reading through the data repeatedly, and engaging in activities of breaking the data down (thematizing and categorising) and building it up again in novel ways (elaborating and interpreting).

Thematic analysis was used in this study to analyse the data. Thematic analysis involved sorting the data into particular themes, categories and patterns (Babbie 2007:384; De Vos 2005:337). According to Holloway (2005:66), analysing focus groups is basically the same as analysing any other qualitative self-reported data. At the very least, the researcher draws together and compares discussions of similar themes and examines how these relate to the variables within the sample population. The process of data analysis proceeded as follows:

First, the researcher assembled and organised the raw data. The process of assembling and organising data involved classifying and indexing the data to enable easy access to the parts of the data when required. This process can be described as essentially reducing the data to more manageable units so that data can be retrieved and reviewed (Polit & Beck 2008:509).

The data collected by means of audiotape was transcribed verbatim by the researcher. Doing all or some of your own interview transcription provides an opportunity to get immersed in the data, an experience that usually generates emergent insights (De Vos 2005:336). The researcher typed and organised handwritten field notes in order to immerse himself in the data. All data collected was securely stored and not shared with any other person without permission being given by the study informants. The original interview tapes were destroyed once the study was fully completed.

The researcher utilised the Tesch's eight steps of data analysis found in De Vos (1998:343). Based on the Tesch's method of data analysis, the researcher:

- (1) Read carefully through all the transcripts to get a sense of the whole. This process involved reading and rereading field notes and transcripts, recalling observations and experiences and listening to tapes until the researcher was immersed in the data (Burns & Grove 2009:521). Out of this immersion emerged

new perspectives, new linkages, new understandings and theories (De Vos 2005:337).

- (2) Picked one transcript file and reading through it, jotting down ideas as they came to mind, asking what the interview is all about, while writing thoughts or memos in the margin. Writing memos in the margins aided the process of becoming familiar with the data in intimate ways (Terre Blanche et al 2006:323).
- (3) Read again through all the transcript files and underlined units of meaning related to the identified major categories. Similar topics were clustered together and formed into columns that were arranged into major topics, unique topics and leftovers. Categories, themes and patterns were generated by this process (Burns & Grove 2009:521).
- (4) Took the list and returned to the data. The topics were abbreviated as codes and the codes were written next to the appropriate segments of the text (Terre Blanche et al 2006:324). The researcher used the cut-and-paste function in a word processor to move bits of text around. All text relating to a particular code heading was cut-and-pasted to that code heading.
- (5) Put the units of meaning into major categories while at the same time identifying subcategories within the major categories. The categories were re-coded, leading to emergence of subcategories.

- (6) Identified relationships between major and subcategories. Lines were drawn between the categories to show interrelationships. As categories of meaning emerged, the researcher searched for those that have internal convergence and external divergence. Within these categories, convergence and divergence of opinions between informants were identified.
- (7) Recoded the existing data when necessary.
- (8) The raw data was also sent to an independent coder for analysis. This is a doctor of philosophy (PHD) student who has experience in qualitative research and who was asked to do open coding. The independent coder was not given any prearranged themes or categories to use. Only a protocol with guidelines for data analysis was given. Thereafter, a meeting was held with the independent coder for consensus discussion on the themes and categories reached independently. The results of the research were discussed in light of relevant literature and information obtained from similar studies.

## **2.4 ETHICAL CONSIDERATIONS**

Babbie (2007:62) has defined ethics as conforming to the standards of conduct of a given professional group. Polit and Beck (2010:121) have described three primary ethical principles on which standards of ethical conduct in research are based namely: beneficence, respect for human dignity, and justice.

### **2.4.1 Beneficence**

Beneficence is one of the most fundamental ethical principles in research. This principle obliges the researcher to minimise harm and maximise the benefits that the research will afford to the informants in the research study (Polit & Beck 2010:121). In this study, the researcher minimised harm and maximised the benefits of the research to participants.

### **2.4.2 Respect for human dignity**

This principle includes the participants' right to self-determination and the right to full disclosure. This principle means that prospective informants have the right to decide voluntarily whether to participate in a study, without risking penalty or prejudicial treatment. It also means that the nature of the study, the person's right to refuse participation, the researcher's responsibilities, and likely risks and benefits should be fully explained to the study participants (Johnson & Christensen 2008:116). In this study, the researcher respected the participants' right to self-determination and the right to full disclosure.

### **2.4.3 Justice**

This principle requires that the researchers treat research informants with fairness and equity during all stages of research (Terre Blanche et al 2006:68). In this study, the researcher treated participants with fairness and equity throughout the research process.

### **2.4.4 Procedures for protecting study participants**

Researchers should follow certain procedures in order to adhere to the fundamental ethical principles of conducting research (Polit & Beck 2010:121). In this study risk-benefit assessment, informed consent, confidentiality procedures, debriefing and referrals, treatment of vulnerable groups and external review were used in order to adhere to the fundamental ethical principles of conducting research.

### **2.4.5 Risk-benefit assessment**

Researchers should carry out risk-benefit assessment in research studies to determine whether the risks to participants are commensurate with the benefit to society in terms of the quality of evidence produced (Polit & Beck 2010:125). In this study, the need for continuous monitoring to cues about risks and benefits was noted. The researcher weighed the risks to the informants against the potential benefits to society and the costs and benefits to individual informants. In this study the risk was minimal while the study helped to explore the factors influencing the use of VCT services by the university students in order to identify the possible barriers and enhancers of such services in this group. The study also assisted in making the recommendations to improve the use of



VCT by university students. The research findings were made available to the informants in order to empower them.

#### **2.4.6 Informed consent**

According to Johnson and Christensen (2008:109), informed consent involves agreeing to participate in a study after being informed of its purpose, procedures, risks, benefits, alternative procedures, and its limits of confidentiality.

Verbal consent was sought and given before the commencement of the focus group discussions. The informants were provided with adequate information needed to make reasoned decision about participation into the study, so that they could give informed consent. Such information included the purpose and nature of the study, its methods, risks and benefits.

The researcher requested informants to sign a consent form in order to document their voluntary and informed participation. Consent to continue participating in the study was reconfirmed as the focus group discussions progressed. According Holloway (2005:28), it is essential to gain participants' agreed consent to participate in order to avoid harming them.

The informants were informed that they may withdraw their participation from the study at any time without penalties. According to Johnson and Christensen (2008:117), researchers should state clearly in their studies that informants have the right to withdraw from the study at any time.

No monetary incentive or stipend was paid to informants. Informants were only provided refreshments during the focus group discussions.

#### **2.4.7 Confidentiality procedures**

All the participants in this study signed informed consent that promised confidentiality. A promise of confidentiality is a pledge that any information informants provide will not be publicly reported in a manner that identifies them and will not be made accessible to others (Polit & Beck 2010:129).

The study was conducted anonymously and no identifying information such as names, addresses or other personal information was asked from the participants. Anonymity means keeping the identity of the informant from everyone, including the researcher (Babbie 2007:64).

All tapes containing the interview transcripts were kept in a secure place and destroyed after the transcription.

#### **2.4.8 Debriefings and referrals**

The researcher offered a debriefing session after data collection was completed to permit informants to ask questions or to air complaints. The researcher left his details to informants to contact him at a later stage if they have anything to discuss related to the study. According to Johnson and Christensen (2008:116), debriefing means a post study interview in which all aspects of the study are revealed, any reasons for deception are explained, and any questions the informant has about the study are answered. Debriefing helped the researcher to discover any problems generated by the research experience so that those problems can be corrected. Informants were informed of the availability of free counselling services at the university should they find the interviews provoking feelings of anxiety or distress.

#### **2.4.9 Treatment of vulnerable groups**

This study did not involve the use of vulnerable groups such as minors and mentally handicapped people. According to Holloway (2005:27), the rights of vulnerable groups need to be protected in research studies. The students who declined to participate in the study or who withdrew from it were not treated in a non-prejudicial manner.

#### **2.4.10 External review**

The researcher was granted ethical clearance from the UNISA Department of Health Higher Degree Ethical Committee (see Annexure A). The committee served as an institutional review board (IRB) to protect the rights of the institution to which the research was conducted against potential legal implications of neglecting to address important ethical issues of the study. In reviewing research proposal members of the IRB were required to make judgements regarding the ethical appropriateness of the proposed research by ensuring that research protocols were explained to the research informants and that the risks of harm were reasonable in relation to the hoped-for benefits (Johnson & Christensen 2008:120). Permission was also asked and obtained from relevant authorities of the University of Free State to conduct the study at the university (see Annexure B and C).

### **2.5 MEASURES FOR ENSURING TRUSTWORTHINESS**

The trustworthiness or validity of the study refers to the criteria used to judge the quality of qualitative studies (Johnson & Christensen 2008:275). Qualitative researchers are concerned with enhancing the trustworthiness of a study. Trustworthiness of a study is also known as the rigour or truth-value of the study. Trustworthiness of a study is associated with openness, relevance (including clarity of the research question and its significance to nursing), epistemological and methodological congruence, scrupulous adherence to a philosophical perspective (methodological rigor), thoroughness in collecting data, and consideration of all the data in the analysis process, and the researcher's self-understandings (Burns & Grove 2009:54). Qualitative researchers ought to demonstrate this trustworthiness when conducting their studies. According to Holloway (2005:276), a piece of research writing that is not trustworthy is unethical, as it does not do justice to the experience of the informants. There are distinctive criteria to judge qualitative research for its trustworthiness. Streubert-Speziale and Carpenter (2007:49) have described the following criteria to judge qualitative research for its trustworthiness namely: credibility, dependability, confirmability and transferability.

### 2.5.1 Credibility

*Credibility* refers to confidence in the truth of the data and its interpretations of them. A qualitative study is credible when it presents an accurate description or interpretation of human experiences as lived or experienced by the informants. Qualitative researchers must strive to establish confidence in the truth of the findings for the particular informants and contexts in the research. Credibility is the equivalent of internal validity in quantitative research. Credibility fits between informant's views and researcher's representation of them (Gerrish & Lacey 2006:169).

The focus group interviews and field notes data were gathered at the Free State University (QwaQwa Campus) over a period of four weeks in order to enhance the credibility of the study. This strategy is referred to as prolonged engagement. Prolonged engagement refers to the investment of sufficient time collecting data to have an in-depth understanding of the culture, language, or views of the people or group under study, to test for misinformation and distortions, and to ensure saturation of important categories (Polit & Beck 2010:495). Prolonged engagement was essential for building trust and rapport with the informants, which in turn made it possible for useful, accurate, and rich information to be obtained.

The researcher took back the data, analysis, interpretations and conclusions to the respondents in order to solicit their views and to determine whether the study's findings reflected their experiences. This strategy to ensure credibility is called member checking. The argument for member checking is that if the researcher's interpretations are good representations of informants' realities, informants should be given an opportunity to react to them (Polit & Beck 2008:545).

The data and the relevant supporting documents were evaluated by an external reviewer in order to enhance the credibility of the study. The external reviewer is a student pursuing a doctorate degree and has vast experience in qualitative research. This measure of ensuring trustworthiness is referred to as inquiry audit. This involves independent researchers cross-checking coding, and aims to reduce subjectivity in processing the data analysis (Terre Blanche et al 2006:326).

### **2.5.2 Dependability**

*Dependability* refers to the stability of data over time and over conditions. Dependability is the alternative to reliability, in which the researcher attempts to account for changing conditions in the phenomenon chosen for the study and changes in the design created by increasingly refined understanding of the study (De Vos 2005:346). Dependability is the equivalent of reliability in quantitative research. Dependability relates to the transparency of the research process and decision trail (Gerrish & Lacey 2006:169).

The researcher ensured that dependability was achieved by applying the credibility of the study. Credibility of a study cannot be attained in the absence of dependability. Dependability is a criterion met once researchers have demonstrated the credibility of the study (Streubert-Speziale & Carpenter 2007:49).

The raw data from the field notes and focus group interviews with the students was reviewed by a PHD student with experience in qualitative research, who concurred with researcher's analysis and interpretation. This measure to ensure dependability is called peer reviewing and debriefing. Peer reviewing and debriefing expose researchers to the searching questions of others who are experienced in the methods of naturalistic inquiry and the phenomenon being studied (Polit & Beck 2008:548).

In this study, the process of data collection and analysis was recorded in detail so that other researchers could clearly understand the methodological and analytic decisions made. This strategy to ensure dependability is called audit trail which refers to the systematic collection of materials and documentation that would allow an independent auditor to come to conclusions about the data (Streubert-Speziale & Carpenter 2007:49). It involves the recording of research activities over time that another individual can follow in order to judge the study for its dependability.

### **2.5.3 Confirmability**

*Confirmability* refers to objectivity, that is, the potential for congruence between two or more independent people about the data's accuracy, relevance, or meaning. Confirmability is concerned with establishing that the data represent the information informants provided, and that the interpretations of those data are not figments of the

researcher's imagination. For confirmability to be achieved, the findings must reflect the informants' voice and the conditions of inquiry, and not the biases, motivations, or perspectives of the researcher. Confirmability entails establishing that data, findings and interpretation are clearly linked (Gerrish & Lacey 2006:169).

The researcher became immersed in the everyday life of university students by spending at least 1 hour interacting with the students after each focus group interview session. This measure to ensure confirmability is called persistent observation which refers to the researchers' focus on the characteristics or aspects of a situation or a conversation that are relevant to the phenomena being studied (Polit & Beck 2010:497). Persistent observation helped to provide the depth of the phenomenon being studied.

The researcher was motivated to conduct this study by his fear of HIV/AIDS on his own life as a university student. This led to concern about the impact of HIV/AIDS on the lives of other university students. This shared view between participants and researcher added to the study's 'authenticity' and 'honesty'. This strategy to ensure confirmability is called reflexivity. Reflexivity involves researchers clarifying their role and uncovering their assumptions, experience and background as they affect the process, setting and informants of the research (Holloway 2005:278).

#### **2.5.4 Transferability**

*Transferability*, analogous to generalisability, refers to extent to which qualitative findings can be transferred to (or have applicability in) other settings or groups. Transferability relates to the adequacy of the description to judge similarity to other situations so findings might be transferred (Gerrish & Lacey 2006:169). Transferability is the equivalent of external validity in quantitative research. The applicability of one set of findings to another context rests more with the potential users and not with the researcher (De Vos 2005:346).

The researcher provided sufficient descriptive data in the research in order to enable the readers to judge the transferability of research results to other contexts. This measure to ensure transferability is called thick description. The responsibility of the researcher is to provide sufficient descriptive data in the research report so that

consumers can evaluate the applicability of the data to other contexts (Polit & Beck 2010:493).

The researcher selected information-rich informants in order enable the research results transferable to other contexts. The study used a purposive sample of university students. Purposive sampling is used to justify the inclusion of rich sources of data that can be used to generate or test out the explanatory frameworks (Gerrish & Lacey 2006:182).

The researcher conducted data collection until data saturation has occurred in order to enhance transferability of the study. Saturation refers to the repetition of discovered information and confirmation of previously collected data. This means that rather than sampling a specific number of individuals to gain significance based on statistical manipulation, the qualitative researcher is looking for confirmation of previously collected data (Streubert-Speziale & Carpenter 2007:31).

## **2.6 CONCLUSION**

This chapter gave a detailed description of the research design and methodology employed during the study. The chapter described the type of research design used for the study, sampling methods, data collection methods, pilot interview, study population, and the method of data analysis. In addition, the chapter undertook a detailed discussion of the trustworthiness as well as the ethical considerations to the study. The next chapter will be a presentation of literature review.

## **CHAPTER 3**

### **LITERATURE REVIEW**

#### **3.1 INTRODUCTION**

Literature review is an integral part of the research process. According to Hartas (2010:96), literature review involves a review of relevant research studies and other documents (for example, policy or historical documents), and offers a critical analysis and synthesis of previous research. This chapter presents the literature review used in this study. The aspects of the literature reviewed include: the HIV/AIDS epidemic in South Africa and in the South African higher education sector, factors causing university students' susceptibility and vulnerability to HIV/AIDS, and the impact of HIV/AIDS in the higher education sector. In addition, the advantages, disadvantages, process, principles and the models of VCT, VCT services in the South African higher education sector and the factors influencing its use were also looked at.

#### **3.2 HIV/AIDS EPIDEMIC IN SOUTH AFRICA AND IN THE SOUTH AFRICAN HIGHER EDUCATION SECTOR**

South Africa's HIV/AIDS prevalence rate remains one of the highest globally, despite the different approaches implemented to slow down its spread and to minimise its impact on individuals, families and society. The epidemic continues to be most severe in Southern Africa, with South Africa having more people living with HIV (an estimated 5.6 million) than any other country in the world (UNAIDS 2011:7).

South Africa's HIV/AIDS situation is still the largest HIV epidemic in the world though the HIV data from antenatal clinics suggest that the country's epidemic might be stabilising (Department of Health 2008:2). The total HIV prevalence rate was estimated at 11,0 percent in 2008, while the HIV-positive population was estimated at 5,35 million (Statistics South Africa (STATSSA) 2008:6). Shisana, Rehle, Simbayi, Zuma, Jooste, Pillay-van-Wyk, Mbelle, Van Zyl, Parker, Zungu, Pezi & the SABSSM III Implementation Team (2009:30) put the 2008 national estimate of HIV prevalence among South



Africans of all age groups at 10.6 percent and the total number of people living with HIV in 2008 at 5.2 million.

The estimated national HIV prevalence amongst the women surveyed has remained stable over the past four years. According to the Department of Health (2010a:28), the national HIV prevalence estimate among antenatal women was 29.1 percent in 2006, 29.4 percent in 2007, 29.3 percent in 2008 and 29.4 percent in 2009.

The UNAIDS (2010:30) estimates the overall HIV prevalence in the general population in South Africa at 17.9 percent and the number of people living with HIV at 5.575 million. Of these, an estimated 518 000 were children under 15 years and 2.95 million were adult females over 15 years. The report estimates that there were 332 315 new infections for adults above 15 years in 2010. In addition, the report estimates that 310 000 South Africans died of AIDS in 2010.

### **3.2.1 The prevalence of HIV/AIDS among most-at-risk populations (MARPs)**

The prevalence of HIV/AIDS differs amongst the most-at-risk populations (MARPs) in South Africa. Table 3.1 below shows that African females aged 20–34 years have the highest HIV/AIDS prevalence (33 percent), followed by African males aged 25–49 years (24 percent), high-risk drinkers (14 percent), people with disabilities (14 percent), recreational drug users (11 percent) and males aged 50 years and above 6 percent). Men who have sex with men (MSM) have the least HIV/AIDS prevalence (1.6 percent).

**Table 3.1 HIV prevalence among the most-at-risk populations in South Africa**

<b>Most-at-risk populations</b>	<b>Prevalence</b>
African females aged 20-34 years	33 percent
African males aged 25-49 years	24 percent
Males 50+ years	6 percent
Men who have sex with men (MSM)	1.6 percent
High-risk drinkers	14 percent
Recreational drug users	11 percent
People with disabilities	14 percent

(Department of Health 2010b:25)

### 3.2.2 The prevalence of HIV/AIDS associated with age and gender

The prevalence of HIV/AIDS in South Africa differs by age and gender. Table 3.2 below shows detailed information on the prevalence of HIV by age and gender in 2008. This table indicates that the HIV prevalence peaked in females aged 25–29 years to 32.7 percent and for males it peaked to 25.8 percent in the 30–34-year-old age group.

The gender variations in HIV prevalence are also noted to be established in younger age groups. The same table also shows high levels of HIV infection among young females. For example, among 15–19-year-olds, female prevalence is 2.7 times higher than that of males.

**Table 3.2 Estimated prevalence of HIV/AIDS by age and sex in South Africa**

<b>Age group</b>	<b>Males</b>	<b>Females</b>
2–14	3.0 percent	2.0 percent
15–19	2.5 percent	6.7 percent
20–24	5.1 percent	21.1 percent
25–29	15.7 percent	32.7 percent
30–34	25.8 percent	29.1 percent
35–39	18.5 percent	24.8 percent
40–44	19.2 percent	16.3 percent
45–49	8.4 percent	18.1 percent
50–54	10.4 percent	10.2 percent
55–49	6.2 percent	7.7 percent
50–54	10.4 percent	10.2 percent
55–59	6.2 percent	7.7 percent
60+	3.5 percent	1.8 percent

(Shisana et al 2009:31).

Table 3.2 shows that in contrast to males, the HIV prevalence among females increases even more dramatically in subsequent age cohorts, reaching 21.1 percent among the 20–24-year-olds, and 32.7 percent among 25–29-year-olds. In the age group 30–34, the disproportions in HIV prevalence are much smaller, although with females still having a higher HIV prevalence. The same table reveals that HIV infection is high in older

people, ranging from 6.2 percent among males aged 55–59 years and 10 percent among males aged 50–54 years.

UNAIDS (2010:31) estimates the HIV/AIDS prevalence rate in South Africa to be 17.8 percent among those aged 15–49, with some age groups being particularly affected. Young adults, especially women, have been particularly affected by HIV/AIDS. In SSA, more women than men are living with HIV, and young women aged 15–24 years are as much as eight times more likely than men to be HIV positive (UNAIDS 2010:10). In South Africa, it is reported that between 1997 and 2004, the death rate for women aged 20–39 tripled and for men aged 30–44 doubled (Knight 2006:2).

### **3.2.3 Prevalence of HIV/AIDS per province**

Apart from race, age and gender, the HIV/AIDS prevalence also differs by province in South Africa. According to the Department of Health (2010a:30), KwaZulu-Natal has the highest HIV/AIDS prevalence followed by Mpumalanga and Free State with overall prevalence greater than 30 percent. North West, Limpopo, Gauteng and the Eastern Cape have prevalence between 20 percent and 30 percent and only Northern Cape and Western Cape are the only provinces that have a prevalence rate of below 20.0 percent.

### **3.2.4 The prevalence of HIV/AIDS in the higher education sector**

The South African higher education sector is no exception and is being affected fundamentally by the epidemic. A study by the HEAIDS (2010:29) found that the mean HIV prevalence for students was 3.4 percent. The study also found that the mean HIV prevalence for service staff, administrative staff and academic staff was 12,2 percent, 4.4 percent and 1.5 percent respectively. The study comprised a very large sampled population that was representative of the 21 higher education institutions offering contact education in South Africa.

A study by Booyesen, Bachmann and Pelsler (2005:170) on the impact of the HIV/AIDS epidemic on the University of Free State found that 9.2 percent of students, and 4.9 percent of staff were infected with HIV. The study revealed that over the next ten years, an estimated 2 308 of more than 18 thousand students at the Bloemfontein and QwaQwa campuses will be infected with HIV in any given year. The study also revealed

that the average annual number of new HIV infections amongst students will be 258, while an average annual number of new AIDS cases will be 167.

### **3.3 UNIVERSITY STUDENTS' SUSCEPTIBILITY AND VULNERABILITY TO HIV/AIDS**

There are many factors causing university students' susceptibility and vulnerability to HIV/AIDS. These factors include: the new-found freedom associated with university life, the patterns of sexual relationships, transactional sex, intergenerational relationships, the low perception of risk of HIV infection, violence, crime and sexual harassment (HEAIDS 2010:77). These factors of both vulnerability and susceptibility are discussed below.

#### **3.3.1 The new-found freedom associated with university life**

For many students university life is an opportunity to experiment and to be adventurous. Very often experimentation with sex, alcohol and drugs occur during university years, especially among students who live away from home. It is risky sexual behaviour among students that promotes the transmission of HIV (UNAIDS 2008:67).

#### **3.3.2 The patterns of sexual relationships**

Multiple concurrent partnerships are common in South Africa. In 2008, five times more males (30.8 percent) reported having had more than one sexual partner in the past 12 months than females (6 percent) (Shisana et al 2009:42). The existence of multiple concurrent partners is reported to be a contributing factor for fuelling the HIV/AIDS epidemic among university students (Halperin & Epstein 2007:20).

#### **3.3.3 Transactional sex**

Transactional sex occurs when sex is provided in exchange for favours, gifts and recreational or travel opportunities. Poverty is an explanation of why people become engaged in risky activities as well as take short-term health risks; in order to earn a living and change their lives for the better (Bourne & Charles 2010:424). Many students migrate from rural areas to towns and cities to attend universities. This has implications

on the ability of students to be financially secure while living away from home in urban settings, making them vulnerable to HIV infection.

### **3.3.4 Intergenerational relationships**

Intergenerational sex or age mixing is an important social determinant of HIV infection. Sex with older partners is a risky factor for young people if their sexual partners are in higher prevalence pools as a product of being older. For example, youth who had partners five or more years older than themselves exposed themselves to HIV, as it exposed them to a higher prevalence age group (Shisana et al 2009:40).

### **3.3.5 The low perception of risk of HIV infection**

University students are vulnerable and susceptible to HIV/AIDS due to their low perception of risk of HIV infection. A study among undergraduate students of selected tertiary educational institutions in Osun State of Nigeria revealed that the majority of the students perceived themselves to be at little or no risk of HIV infection despite a high prevalence of HIV risky indicators among them such as a history of having at least one sexually transmitted infection, a history of having multiple sexual partners, and a history of having unprotected sexual intercourse (Ijadunolo, Abiona, Odu & Ijadunolo 2007:134). The same study also revealed that only 5 percent of the respondents have undergone VCT for HIV.

### **3.3.6 Violence, crime and sexual harassment**

Violence, crime and sexual harassment are risky factors for HIV transmission among university students. HEAIDS (2010:77) revealed that, the prevalence of HIV was significantly higher among students who indicated that they had been tricked or pressurised into sex (7,4 percent) than those who indicated that they were not (4,8 percent). The study revealed that unwanted and often insistent sexual advances constituted the most widespread forms of sexual harassment. This was reported by female students, with male students as the primary perpetrators. There were also reports of harassment by staff, including security staff at gates making lascivious remarks to passing students.

### 3.4 THE IMPACT OF HIV/AIDS IN THE HIGHER EDUCATION SECTOR

The education sector in general is being hit several-fold by the HIV/AIDS epidemic, but three effects are paramount, namely that the epidemic threatens the supply, demand and quality of education at the very moment Africa is striving to achieve Education for All (EFA) by the year 2015 (Inkoom 2008:8). Attrition of staff and students entering the tertiary system impacts negatively on the sector's core business: teaching, research, learning and community engagement. The loss of qualified graduates impacts on national and regional development, diminishing private and social returns to investment in higher education.

A study by Booysen et al (2005:170) on the impact of the HIV/AIDS epidemic on the University of Free State found that 9.2 percent of students, and 4.9 percent of staff were infected with HIV. The same study also revealed that 89 AIDS-related deaths will occur per annum over the next ten years.

With HIV prevalence rates in the South African universities reaching unprecedented levels, the building and retaining of a pressure group of social capital and a critical mass is imperative. The generational impact of the epidemic offers a critical void for tertiary education institutions to fill by providing concerted leadership and by proactive engagement of the critical mass in gestation at these universities. Operating as they are at the vanguard of social structures potentially facilitating an intelligent and coordinated response to stem the tide of the epidemic, tertiary education institutions in the South Africa are required to move beyond prevention and work across a continuum that includes prevention, treatment, care and support, research, innovation, and 'thinking faster than the epidemic' (Van Wyk, Pieterse, Otaala and the Centre for the Study of AIDS University of Pretoria, South Africa 2006:2).

Furthermore, the resulting high death rate of young professionals not only annuls the role of education but it also makes economic planning difficult. This points to the further consequences of the epidemic for human capital, with relatively large number of young people who have received tertiary education dying in the prime of their lives, thus turning this investment of government in education into a loss. This has negative implications on the country's socio-economic development.

### **3.5 VOLUNTARY COUNSELLING AND TESTING (VCT)**

VCT is a process in which an individual undergoes counselling, enabling him or her to make an informed choice about being tested for HIV (Izugbra, Undie, Mudege & Ezeh 2009:243). According to Obermeyer and Osborn (2007:1762), VCT emphasises the need for voluntary, informed consent prior to testing as well as pre- and post-test counselling. This section describes the process, principles, models, advantages and disadvantages of VCT.

#### **3.5.1 The process of VCT**

The VCT process generally consists of three main stages namely pre-test counselling, post-test counselling and referral to other HIV services (WHO & UNAIDS 2007:36).

##### ***3.5.1.1 Stage 1: Pre-test counselling***

In pre-test counselling some counselling is conducted before the test. During this stage, health care providers conduct an education session and a risk assessment, with a primary focus on prevention counselling for clients both prior to and after receiving their test results. Pre-test counselling is designed to give information and to obtain consent (Obermeyer & Osborn 2007:1768). Pre-test counselling can be provided in the form of individual information sessions or in group health information talks. Pre-test counselling usually lasts between 20 to 45 minutes. The main focus of the pre-test counselling sessions is preparing the clients for the test results, whether positive or negative (Sagung Sawitri, Sumantera, Wirawan, Ford & Lehman 2006:579).

After the pre-test information, the individual makes a decision whether he or she wants to take an HIV test. Preventative counselling is done if the person does not want to take the HIV test. Declining an HIV test should not result in reduced quality or denial of services, coercive treatment or breach of confidentiality, nor should it affect a person's access to health services that do not depend on knowledge of HIV status (WHO & UNAIDS 2007:38). Individuals declining the test should be offered assistance to access VCT in the future. If the individual wants to take the HIV test, the actual testing is done after informed consent is obtained from the client.

### **3.5.1.2 Stage 2: Post-test counselling**

Post-test counselling offers the client an opportunity to discuss feelings about the result with the counsellor after hearing the test result (Sagung Sawitri et al 2006:579). In post-test counselling, the balance of information, encouragement of preventive behaviour and referral depends on whether test results are positive or negative. In the case of a negative result the counsellor will encourage the client to keep himself or herself safe from HIV infection, and in the case of a positive diagnosis the individual is offered ongoing emotional support, is encouraged not to spread the virus to others, is referred for further medical evaluation and anti-retroviral treatment and is counselled on how to live a healthy lifestyle so as to protect his or her immune system (WHO &UNAIDS 2007:40).

### **3.5.1.3 Stage 3: Referral to other HIV services**

HIV test results should be communicated with an explanation of the prevention, treatment, care and support services available to the clients. Clients who are found HIV positive are referred to other HIV services. Follow-up counselling, medical care, emotional and social support are also given to the clients who are found HIV positive. Medical care is given in order to manage opportunistic infections, and emotional and social support is given in order to help clients who test HIV positive to cope with disease (WHO &UNAIDS 2007:40).

## **3.5.2 The principles of VCT**

VCT is voluntary and the “three C’s” – informed consent, counselling and confidentiality – must be observed (WHO &UNAIDS 2007:19). Recognised in the UNAIDS/WHO policy statement on HIV testing, HIV testing must be conducted under the above mentioned principles. The process and results must be:

- Only conducted with informed consent, meaning that it is both informed and voluntary
- Accompanied by counselling and factual information
- Confidential



### **3.5.2.1 *Informed consent***

Informed consent means that a person should be advised in detail of all the advantages, disadvantages and risks of an HIV test so that the person is fully informed when having to make a decision regarding consent (Cohen & Ankus [s.a.]:94). Proper pre-test and post-test counselling is regarded as the minimum information required to constitute informed consent for an HIV test. Informed consent can be obtained verbally or in writing from clients.

### **3.5.2.2 *Voluntary***

All HIV testing must be voluntary, which means that a patient has the right to decide, after counselling, to be tested or not. VCT is neither mandatory nor compulsory (WHO & UNAIDS 2007:20). If clients are undecided, they should be informed that they can return at any time when they are prepared to take an HIV test.

### **3.5.2.3 *Accompanied by counselling and factual information***

HIV testing should be accompanied by counselling, giving of factual HIV information, and a personal risk assessment. Providing the client with information and facilitating discussion about HIV provides an opportunity for learning, correcting misinformation, assisting the patient in identifying personal risks and coping strategies in preparation for the result (Cohen & Ankus [s.a.]:94). Counselling assists people to make informed decisions, cope better with life challenges, lead positive lives and prevent further the transmission of HIV (Yahaya et al 2010:139).

### **3.5.2.4 Confidentiality**

Persons with HIV/AIDS have a legal right to confidentiality and privacy concerning their health and HIV status (Section 14 of the Constitution of the Republic of South Africa Act No. 108 of 1996). VCT should be carried out in an environment that ensures confidentiality. Keeping and maintaining confidentiality regarding HIV status will encourage people with HIV/AIDS to be tested, treated and supported. It will also help to protect HIV positive people against exposure to potential discrimination and stigmatisation. Therefore it is essential that the client's right to confidentiality regarding his or her HIV status be maintained.

### **3.5.3 Advantages and disadvantages of VCT**

VCT has both advantages and disadvantages. These advantages and disadvantages are briefly discussed below.

#### **3.5.3.1 The advantages of VCT**

The advantages of VCT are: it leads to informed decisions, it provides an entry into prevention and treatment and it reduces risky sexual behaviours. These advantages are briefly discussed below.

##### **3.5.3.1.1 Leads to informed decisions**

According to Vajpayee et al (2009:826), VCT for HIV enables an individual to make an informed choice about being tested for HIV and to cope with his or her test results.

If an individual test negative, he or she will take precautions not to get infected through sexual activities by adopting safe sex practices. Conversely, if an individual tests positive, he or she will adopt safe sex practices, insuring that he does not infect other people, thereby stopping the spread of the virus. VCT is therefore important in order to curb the spread of HIV and AIDS (Botma et al 2007:49).

The individuals who test positive for HIV receive medical and emotional assistance and can be counselled to cope with the diagnosis. They are informed about adopting a

healthy lifestyle, thus protecting the immune system as much as possible and delaying the progression of the disease. Medical assistance includes anti-retroviral therapy for those whose infection has progressed to a certain level of severity (Botma et al 2007:49).

### ***3.5.3.1.2 Provides an entry into prevention and treatment***

VCT is important as an entry strategy for both prevention and access to treatment, care and support services. VCT is a key element to identifying HIV infected persons who could benefit from therapeutic interventions (Yahaya et al 2010:139).

A major factor limiting the prevention dividend of HIV treatment, however, is that more than 60 percent of people living with HIV are unaware of their HIV status (UNAIDS 2011:23). This limits access to treatment; care services and hampers prevention efforts. Early detection ties in with a prolonged life and improved quality of life for those living with HIV/ AIDS. Thus, the provision of VCT services is important in order to reduce HIV/AIDS-related mortality (UNAIDS 2010:29).

Knowing one's HIV status allows one to get the appropriate medical treatment if they are positive (Bourne & Charles 2010:420). VCT services are a critical opportunity to provide risky-reduction counselling and information to all clients, and they act as an essential gateway for preventing HIV transmission (USAID 2009:1).

Additionally, VCT is a key entry point to HIV/AIDS services for people living with HIV (PLWHIV). VCT has been shown to have a role in both HIV prevention and, for people with an infection, as well as an entry to care services such as family planning, support groups, anti-retroviral therapy, planning for the future, treatment of sexually transmitted infections, management of TB and other opportunistic infections as well as the reduction of HIV/AIDS related stigma (Mavhandu-Mudzusi, Netshandama & Davhana-Maselesele 2007:254).

Currently, VCT is celebrated as a very critical and cost-effective tool for the screening, prevention, and control of HIV in Africa. It is key to the success of interventions aiming to prevent mother-to-child HIV transmission. Benefits of a positive HIV test result include getting medical help to prevent HIV transmission to the baby (Rogers, Meundi,

Amma, Rao, Shetty, Antony, Sebastian, Shetty & Shetty 2006:807). By providing information on the sero-status of pregnant mothers, VCT has saved the lives of several thousand new-borns in Africa (Izugbara et al 2009:243).

The client with a positive diagnosis as well as family members may therefore receive timely emotional support and education about the disease. Providing VCT to family members of HIV-positive clients can be an effective method for facilitating HIV disclosure among couples and family members, for identifying and preventing new HIV infections within the family, and linking previously undiagnosed family members with care and treatment (Mermin et al 2005:964). In addition, disclosing status and providing testing to family members may also improve adherence to medication and enhance support systems.

VCT must be expanded, as most people get to know their HIV status very late and access treatment later, which reduces the effectiveness of treatment programmes. As VCT services expand, systems are strengthened to monitor the health status of people living with HIV/AIDS as access to treatment is provided at appropriate time, and HIV/AIDS related mortality is likely to be further reduced (UNAIDS 2010:29).

The national roll out of VCT services in South Africa is crucial as the country seeks to ensure that at least 80 percent of people who are eligible for treatment for HIV are receiving it and at least 70 percent should be alive and still on treatment after five years (SANAC 2011:3).

#### ***3.5.3.1.3 Reduces risky sexual behaviours***

The process of discovering one's HIV status, irrespective of the test result, is an opportunity for education and motivation to modify behaviour aimed at reducing the risk of HIV transmission (Vajpayee et al 2009:826). Increasing knowledge of HIV status is important as it has been linked to an increase in prevention behaviours among those who test positive through VCT (Shisana et al 2009:48). People infected with HIV who are asymptomatic may not be aware of their status without getting tested. Once people know their HIV status they are able to adopt preventive measures to avoid transmitting the virus to others.

VCT is shown to be effective in changing risky sexual behaviour. A study by Mola, Mercer, Asghar, Gimbel-Sherr, Gimbel-Sherr, Micek and Gloyd (2006:178) in Mozambique revealed that people who chose to participate in VCT, compared to people from the general clinic population, reported to use condoms significantly more often after VCT. In addition, a randomised controlled trial to evaluate the relative efficacy of adding VCT to information dissemination in reducing HIV-related risky behaviours among Hong Kong male cross-border truck drivers revealed that VCT was effective in improving HIV-related knowledge, increasing prevalence of consistent condom use and decreasing the prevalence of self-reported STDs among the cross-border truck drivers (Lau, Tsui, Cheng & Pang 2010:25).

A study by Sagung Sawitri et al (2006:581), revealed the ways in which people's lives changed following the HIV test. The study was on HIV testing experience of drug users in Bali, Indonesia. The study revealed that those with positive results reported decreased risky drug use behaviour (50 percent), general health improvement (50 percent), and decreased risky sexual behaviour (37.5 percent). The study also revealed that individuals with negative test results indicated the same changes with 50 percent decreasing risky sexual behaviour, 43.7 percent decreasing risky drug use behaviour, and 31.2 percent improving their general health.

### ***3.5.3.2 The disadvantages of VCT***

Although VCT has many advantages, there exist almost insurmountable difficulties in the acceptance of VCT by communities. These difficulties include: VCT leads to HIV/AIDS-related stigma and discrimination, and negative emotional outcomes; VCT is associated with economic costs, the lack of confidentiality and privacy, and the shortage of resources.

#### ***3.5.3.2.1 Leads to HIV/AIDS-related stigma and discrimination***

People desist from going for VCT because of the fear of stigmatisation, rejection, and ostracism by community, family, friends and loved ones once a positive diagnosis is made. The fear of stigmatisation is a barrier to HIV testing and has negative consequences for HIV/AIDS prevention and treatment in South Africa (Meiberg et al 2008:53).

### ***3.5.3.2.2 Leads to negative emotional outcomes***

Another great barrier to VCT is the fear of a positive diagnosis. Reactions of clients to a positive diagnosis include a variety of emotions such as shock, denial, disbelief, despair, numbness, helplessness, guilt, anxiety, depression, hopelessness, negative expectations about the future, obsessional thoughts and suicide (Botma et al 2007:49). HIV/AIDS generally evoked feelings of fear, mainly owing to its severe personal and social consequences on both health and emotional well-being (Manirankunda et al 2009:285). Because of these fears, most people prefer not to know their HIV status.

A study among pregnant women in rural Southern India revealed that the risks of a positive HIV test result included thinking you would die soon, suffering from psychological stress and wanting to kill or hurt yourself (Rogers et al 2006:807). The study further revealed the risks most commonly associated with telling your partner you were HIV infected included fear of rebellion, abandonment, blame each other for bringing the virus home, and losing custody of the children. The study also revealed the risks of telling the community that you were HIV positive included parents being angry, community perceiving you as dirty or dangerous, and rejection from friends and parents.

### ***3.5.3.2.3 VCT is associated with economic costs***

The costs of VCT such as purchasing of test kits and payment service charges, indirect economic costs particularly among rural populations such as travelling expenses, foregone income from working time spent seeking VCT services and other costs that can discourage potential clients from using VCT services (Kakoko, Astrom, Lugoe & Lie 2006:992).

### ***3.5.3.2.4 The lack of privacy and confidentiality***

The concerns over issues of privacy and confidentiality discourage people from seeking VCT in district hospitals and clinics (Angotti et al [s.a.]:12). It is further reported that VCT counsellors are not always adequately trained, may lack medical knowledge, are rude, unfriendly and do not keep confidentiality (Njagi & Maharaj 2006:120).

### ***3.5.3.2.5 The shortage of resources***

Inadequate counselling rooms, insufficient testing facilities, inadequate human resources and the lack of educational resources are the challenges associated with VCT in South Africa (Mavhandu-Mudzusi et al 2007:256).

## **3.5.4 The models of VCT**

There are four known models of voluntary HIV counselling and testing namely, client-initiated VCT, mobile VCT, provider-initiated VCT and home-based VCT. These are discussed briefly below.

### ***3.5.4.1 Client-initiated VCT***

Client-initiated VCT (also called traditional or facility-based VCT) involves individuals actively seeking HIV testing and counselling at a facility that offers these services (WHO & UNAIDS 2007:18). Client-initiated VCT usually emphasises individual risk assessment and management by counsellors, addressing issues such as the desirability and implications of taking an HIV test and the development of individual risky reduction strategies. Client-initiated VCT is conducted in a wide variety of settings including health facilities, stand-alone facilities outside health institutions, through mobile services, in community-based settings and even in people's homes. The model is characterised by governments and other service providers making HIV counselling and testing services available, public awareness of that availability, an individual's decision to seek out a facility providing VCT services and the individual's subsequent conscious choice to return to receive test results along with associated post-test counselling and referral. Client-initiated VCT is voluntary and the "three C's" – informed consent, counselling and confidentiality – must be observed (WHO & UNAIDS 2007:20).

While client-initiated VCT remains the primary model in many developing countries, its coverage has remained largely inadequate. In many settings where health systems are weak and resources are limited, its availability is constrained by shortages of skilled service providers, inadequate material resources, poor infrastructure, inadequate procurement and supply management systems (Matovu & Makumbi 2007:1316). The

model may not appeal to groups who often do not go readily to health facilities such as young people and men (Mulogo, Abudulaziz, Guerra & Baine 2011:1474).

#### **3.5.4.2 Mobile VCT**

Mobile VCT denotes the provision of HIV counselling and testing services by mobile teams from a van equipped with HIV-testing facilities. The principle of mobile VCT is to take VCT to populations that are considered to be 'hard-to-reach', such as internally displaced populations, sex workers and truckers and employees at their workplace. Most mobile VCT services are provided in collaboration with local partners. For example, the South African government work with churches and faith-based organisations in providing mobile VCT services to people. Mobile VCT can help to expand VCT services to the most at risk populations such as sex workers, military personnel, truck drivers etc (Matovu & Makumbi 2007:1316).

However mobile VCT programs have also challenges. Mobile VCT programs can be expensive, require many resources in terms of equipment and manpower, can be difficult to ensure follow-up after post-test counselling, can be difficult to ensure quality and can be difficult to prioritise counselling where clients have other pressing health needs (ibid).



### **3.5.4.3 *Provider-initiated VCT***

Provider-initiated VCT (or routine offer of HIV counselling and testing) refers to HIV testing and counselling which is recommended by healthcare providers to persons attending healthcare facilities as a standard component of care (WHO & UNAIDS 2007:19). The major purpose of provider-initiated VCT is to enable specific clinical decisions to be made and/or specific medical services to be provided that would not be possible without the knowledge of the person's HIV status. Provider-initiated VCT helps to reduce the potential fears of utilising VCT services and contributes to ensuring that people with HIV are made aware of their status and situated on a pathway that addresses prevention, care, and treatment (Shisana et al 2009:76). It reduces discrimination of HIV-positive people, leads to decreased violence against women, and makes it easier for people to get tested and to gain access to anti-retroviral treatment (Weiser, Heisler, Leiter, Percy de Korte, Tlou, DeMonner, Phaladze, Bangsburg & Lacopino 2006:1017). The limitations of provider-initiated VCT are that it can lead to shortage of staff and competing demands for health service provider's time. In addition, provider-initiated VCT can create long waiting times and inconvenient hours of operating (Matovu & Makumbi 2007:1318). It can increase HIV/AIDS-related stigma because of the association of HIV/AIDS with sexual behaviour and drug abuse (Kippax 2005:231).

### **3.5.4.4 *Home-based VCT***

Home-based VCT (or family-based VCT) involves the use of lay counsellors or community health workers to provide counselling and testing services in clients' homes. Home-based VCT eliminates the cost of transport to the test site and increases uptake especially among women, as they do not need to seek permission for VCT or money for transport to VCT sites from male partners (Matovu & Makumbi 2007:1318). It can avoid the inconvenience of facility-based VCT and can reduce stigma associated with being seen at the VCT clinic (Negin, Wariero, Mutuo, Jan & Pronyk 2009:853). Home-based VCT is cost effective, has the potential to stimulate intra-household and intergenerational communication about HIV and fosters awareness and collective engagement at the level of the entire communities (ibid). However home-based VCT can be expensive, considering the cost of doing multiple home visits by the counsellors to provide VCT and ART. Home-based VCT can also be source of discomfort in those

areas where people do not want others to know or even suspect that or their family members could be infected with HIV (Nyanzi-Wakholi, Lara, Watera, Munderi, Gilks & Grosskurth 2009:907).

### **3.6 VCT SERVICES IN THE SOUTH AFRICAN HIGHER EDUCATION SECTOR**

By 2005, 74 percent of the higher education institutions in South Africa had established VCT services, with 69 percent of these providing VCT for free (HEAIDS 2010:8). The study revealed that most VCT sites use rapid HIV test-kits and VCT services are often provided by volunteers and psychology students. The study revealed that most VCT sites have strong referral systems and have good working relationships with community-based organisations such as LifeLine, Hospice and local VCT providers. In addition, it was revealed that gaps in services include a lack of support for caregivers who often suffer burn-out; ongoing raining for on-site staff is not always in place; and permanent positions need to be created where VCT is given mainly by volunteers.

However among the university students it is reported that 54 percent of the students had never tested for HIV (HEAIDS 2010:39). The study revealed that the HIV prevalence among the never tester was 2.3 percent and in the Eastern Cape Province it was much higher at 7.5 percent. Understanding the limited uptake of VCT on campus, particularly among students, is an important issue. Qualitative data from the study suggested that the risk of stigma and rejection and a lack of understanding about positive living contribute to individuals being unaware of their HIV status. The study revealed that students and staff reportedly fear the outcome of testing and/or seek to delay testing, preferring to wait until studies are completed, they decide to marry, or begin to feel sick. The study revealed that the student population using campus based VCT services are female, but also include low HIV-risk male students. In addition the study revealed that where VCT is available to staff, it was found that the preference was to go to external service providers.

In response to the low uptake of VCT services by tertiary students many South African higher education institutions implemented the First Things First campaign in 2012 in order to boost the uptake of VCT services (UNISA 2012:15). The First Things First is an innovative voluntary HIV testing, counselling and education campaign at public higher education institutions. The campaign aims to help South African tertiary students to fulfil

their destinies by encouraging them to be responsible, get tested for HIV and empower themselves by knowing their status and committing to behaviour that will protect them and their peers.

It is still too early to evaluate the successes and achievements of the First Things First campaign in improving the uptake of VCT services in South African higher education institutions since it has been recently launched. Time will tell whether the campaign will meet its desired objectives.

### **3.7 FACTORS INFLUENCING THE USE VCT**

In addition to VCT services in the higher education sector are factors influencing the use of VCT. These can be grouped into service oriented factors and personal oriented factors.

#### **3.7.1 Service oriented factors**

Service oriented factors are those that relate to the services of VCT provided. The service oriented factors include such factors such as accessibility of VCT sites, confidentiality and attitude of health care workers, affordability of VCT services and the availability and quality of VCT services offered.

##### ***3.7.1.1 Accessibility of VCT site***

Accessibility to a VCT site would have an effect on whether that service would be utilised or not. Structural barriers to VCT have been well-documented and suggest that distance is a prohibitive factor for accessing testing services, particularly in rural areas. Refusal to be tested or to obtain test results has been attributed in part to obstacles of cost and transportation and to the burden of having to return to health facilities (Obermeyer & Osborn 2007:1764). The long distance to where VCT services are located was also mentioned as a barrier to getting tested by Ugandan and Malawian male youth, especially those in rural and remote areas (Izugbara et al 2009:251). A study by Angotti, Bula, Gaydosh, Kimchi, Thornton and Yeatman (2009:2268) in Malawi found that respondents favoured door-to-door testing because it was convenient. Door-to-door testing removed the obstacle of travel, which is time-consuming and costly.

Indeed, travelling to reach a health facility imposes both a direct cost (for a mini-bus or bicycle rental), but also the opportunity of costs of hours travelling and waiting to be seen by a health care provider (Angotti et al 2009:2269).

The low coverage of VCT services is a reported barrier of VCT uptake. For example a study in India revealed that HIV testing and counselling has been limited in both sexes due to low coverage of VCT services (Vajpayee et al 2009:831). There is need to increase the coverage of VCT services in order to make them more accessible and to boost their uptake.

### ***3.7.1.2 Confidentiality and attitude of health care workers***

Confidentiality and the attitude of health care workers have an effect on the utilisation of VCT services. A study by Njagi and Maharaj (2006:118) (200 among students at the University of KwaZulu-Natal revealed that, the majority of students cited lack of confidentiality as the main reason given for refusing VCT services.

A study by Daftary, Padayatchi and Padilla (2007:573) on HIV testing and disclosure of TB patients in South Africa revealed that patients appreciated the privacy and time spent on HIV counselling but felt pressured to test and lack of empathy from counsellors. Furthermore the study revealed that some clients felt uncomfortable during the consultation because health care workers were rude and unfriendly.

Furthermore, a study in rural Zimbabwe revealed clients' preference for testing personnel to come from outside the community (Chirawu et al 2010:85). People expressed hesitancy for testing to be conducted by local staff. This concern stemmed from the overarching perception that clinic staff does not often respect confidentiality.

### **3.7.1.3 Affordability of VCT services**

The high cost of VCT services is a barrier to their uptake. In a study among male youth in Uganda and Malawi, for instance, comments suggesting that VCT services were unaffordable to young people filled the narratives (Izugbara et al 2009:251). The respondents reported lacking finances that would enable them to travel to where VCT services are obtained or pay for VCT services.

In contrast, a study by Satyanarayana, Chandra, Vaddiparti, Benegal and Cottler (2009:619) in India among wives of heavy drinkers in an urban slum in India showed that free and easily accessible counselling and testing services played a major role in consenting to test.

In addition, a study among university students in Ethiopia revealed that the respondents preferred VCT service to be given in youth clubs followed by government institutions, and these could be because of the free service given at the youth club and the cheap payment in government hospitals (Alemayehu 2010:116).

### **3.7.1.4 Availability and quality of service offered**

The availability and quality of service offered have an effect on the utilisation of VCT services (USAID 2009:1). Studies have shown that VCT uptake is high in urban areas than rural areas. A study in Zimbabwe by Sambisa, Curtis and Mishra (2010:174), revealed that HIV testing uptake was the highest among those living in urban areas. There are many and well-equipped VCT centres in urban areas than in rural areas. Governments should therefore establish more VCT centres in both rural and urban areas to bring VCT services to the door step of the people who need such services (Yahaya et al 2010:141).

Studies have shown that VCT services which are linked to other services have better client uptake than unlinked services. The integration of VCT services with other services can improve the uptake of VCT services (Njagi & Maharaj 2006:117). For instance, a study in Ethiopia revealed that integrating family planning into VCT clinics was feasible, cost-effective and increased both the uptake of VCT and family planning services (Gillespie, Bradley, Woldegiorgis, Kidanu & Karklins 2009:868).

In some countries there are no health services to manage and monitor the condition of those who test HIV positive (Njagi & Maharaj 2006:117). Even in countries where antiretroviral drugs are available they may not be accessible to the majority of people who need them. Though South Africa has the largest antiretroviral therapy programme in the world, but given it also has the world's largest epidemic, access to treatment is low. For example, it is reported that only about 20 percent of South Africans who needed antiretroviral treatment in 2006 received it (Knight 2006:5). At the beginning of 2009, an estimated 37 percent of infected people were receiving treatment for HIV according to the latest WHO guidelines (UNAIDS 2010:30).

A study by Daftary et al (2007:574) on HIV testing and disclosure of TB patients in South Africa revealed that though the prospect of access to ART encouraged TB patients to test, and many remained uncertain about their eligibility for ART. It is highly likely that the greater availability of antiretroviral therapy will create awareness and demand for HIV testing, and this is also likely to increase uptake of VCT.

These high levels of VCT uptake are made even higher when the result turn-around time is shortened by the use of the rapid HIV testing. If the waiting period is long, sometimes clients do not return for test results. In a South African study Hutchinson and Mahlalela (2006:450), it is reported that HIV rapid testing appears to increase HIV testing uptake. The study revealed that the presence of rapid testing, for example, doubled the likelihood that a man would be tested for HIV from 11.4 percent to 22.2 percent. This is due to the decrease in waiting time, thus reducing the problem of losing clients to follow up.

### **3.7.2 Personal oriented factors**

Personal oriented factors are those that emanate from the individual. Personal oriented factors include: knowledge about VCT and HIV/AIDS, attitudes towards VCT services, individual perception towards HIV/AIDS and VCT, level of education, age, gender, HIV/AIDS-related stigma and discrimination.

#### **3.7.2.1 Knowledge about VCT and HIV/AIDS**

Knowledge about the existence, purpose and use of VCT can influence the uptake of VCT services. There are many reported sources of VCT information. These include the media, friends, parents, siblings, teachers, Internet, seminars, workshops, posters and churches (Ileri et al 2012:4).

A study by Njagi and Maharaj (2006:121) on students at the university of KwaZulu-Natal revealed that the students had the knowledge about the advantages of having an HIV test. The study revealed that most of the respondents felt that the advantages of knowing one's HIV status outweigh the disadvantages. The respondents argued that knowledge of HIV status enabled people to seek medical care and treatment, and also to follow a healthy lifestyle. The respondents also stated that if one knows that they are HIV positive, they could take precautions to avoid re-infection and infecting their sexual partners while it motivates HIV negative people to ensure that they maintain their negative HIV status by practising safe sex.

A study by Allison, Lobuna, Kalebe, Kiromat, Vince, Schaefer and Kaldor (2008:620) on the attitudes to HIV testing among carers of children admitted to Port Moresby General Hospital, Papua New Guinea revealed that agreement to HIV testing was found to be related to the number of HIV knowledge questions answered correctly by the women interviewed. To put it more clearly carers who were knowledgeable about HIV (who had answered eight or more of the HIV knowledge questions correctly) would agree to an HIV test for themselves and a child in their care.

Similarly a national population-based study in Zimbabwe revealed that the knowledge that abstinence and use of condoms can prevent HIV infection were significantly associated with HIV testing (Sambisa et al 2010:180).

The knowledge of someone with HIV/AIDS increases the likelihood of being tested for HIV. A study in the Eastern Cape Province of South Africa revealed that knowing someone with HIV/AIDS increased the likelihood of being tested by about 4 percent (Hutchinson & Mahlalela 2006:450).

The prior knowledge of one's HIV status also discourages people towards seeking VCT services. For example a study on the feasibility, acceptability and cost of home-based

HIV testing in rural Kenya revealed that participants who had recently been tested or already knew their status did not request further testing (Negin et al 2009:852).

The awareness of a place nearby where one could be tested for HIV is also associated with knowledge of HIV status (Peltzer, Matseke, Mzolo & Majaja 2009:174). Furthermore, one of the most powerful reasons to get tested is the knowledge that there is appropriate support, and treatment is available if the test is positive (Yahaya et al 2010:139).

The knowledge of the existence, purpose and uses of VCT does not always result in people's willingness towards seeking VCT services. A study among Ugandan and Malawian male youth revealed that despite the participants' high-level awareness of the availability and usefulness of VCT, they had yet to undergo VCT (Izugbara et al 2009:247).

### **3.7.2.2 *Level of education***

The level of education is related to the use of VCT services. A study by Okonkwo, Reich, Alabi, Umeike and Nachman (2007:257) among pregnant women in Nigeria revealed that the women who reported having at least some secondary education were nearly 3.6 times more likely to accept VCT than women who had received either no formal education or a primary school education, and women who had a post-secondary education were 5.6 times more likely to agree to VCT.

Similar findings were reported in Kenya in which the sample distribution by highest level of education showed that a significantly greater proportion of males who had ever been tested had secondary or higher education than their never tested counterparts (Kabiru et al 2010:412). The study also revealed that 66 percent of the males who were in school at the time of the survey had been tested compared to 50 percent of those not in school.

A population-based survey in South Africa revealed that Grade 12 and more formal education was associated with knowledge of HIV status (Peltzer et al 2009:174).



### **3.7.2.3 Attitudes towards VCT services**

The negative attitudes towards VCT can discourage people towards seeking VCT services, whilst positive attitudes towards VCT can motivate people towards seeking VCT services.

The belief that HIV testing is only for the ill may discourage some healthy people who want an HIV test from seeking it (Njagi & Maharaj 2006:155). Moreover, the fear of receiving a positive HIV diagnosis can discourage people towards seeking VCT services. A recurrent finding is that the main reason people do not take HIV tests or return for a result is fear (Obermeyer & Osborn 2007:1765).

In a study among Ugandan and Malawian male youth, the respondents' negative attitudes that associated VCT uptake with an abstinence career, noting that they would not go for VCT because they may be told to stop sexual activity constrained their uptake of VCT services (Izugbara et al 2009:250).

In contrast, people can be motivated towards seeking VCT services due to the positive attitudes they have towards VCT. A study on HIV VCT in Nakuru, Kenya revealed that participants had positive attitudes towards VCT and were more willing to seek HIV testing (Irungu, Varkey, Cha & Patterson 2008:113). The study revealed that the positive attitudes towards VCT held by participants include; VCT was necessary to know one's HIV status, protect themselves and their partner(s) from infection, make plans for their future, get treatment and to prepare for death.

### **3.7.2.4 Perception towards HIV/AIDS and VCT**

The individual perception towards HIV/AIDS and VCT services influences the use of VCT. A study by Omer and Haidar (2010:99), among teachers in Ethiopia revealed that perceived susceptibility to illness was positively correlated with the intention to be tested. This means that the teachers intended to use VCT services if they perceived themselves to be ill.

A study by Njagi and Maharaj (2006:121), among university students at the University of KwaZulu-Natal revealed that almost 22 percent of respondents had undergone VCT

because they felt at elevated risk of HIV infection. The respondents felt at risk of HIV infection either because of their own behaviour or their partner's sexual behaviour.

In contrast, the low perception of risk may discourage some healthy people who want an HIV test from seeking it. According to Obermeyer and Osborn (2007:1764), the major barrier to HIV testing is the individuals' reluctance to acknowledge that they are at risk even when in fact they are. For example a study in Nigeria among college students revealed that the majority of the respondents (85 percent) perceived themselves to be at little or no risk to HIV infection, despite a high prevalence of HIV risky indicators among them such as recent history of unprotected sex, past history of STI and having multiple sexual partners (Ijadunolo et al 2007:134). The study revealed that only 5 percent of them had ever undergone VCT.

In a study among Ugandan and Malawian male youth the critical and commonly mentioned reason given by respondents for not seeking VCT was that they were sure that they were uninfected, even though they themselves frequently admitted to regularly 'walking badly' (engaging in risky sexual practices) (Izugbara et al 2009:248).

A study in South Africa among university students revealed that, the perception that there is limited support available on campus for those who test HIV positive was a factor discouraging university students from seeking VCT services (HEAIDS 2010:93).

### **3.7.2.5 Age**

Age is a factor influencing the use of VCT services. The study by Okonkwo et al (2007:257) among pregnant women in Nigeria revealed as the women aged, they were more likely to accept VCT. The study revealed that women who were between 25 and 35 years of age were 1.9 times more likely to accept VCT than women under the age of 25, and women ages 35 and older were 2.4 times more likely than women under 25 years of age to agree to VCT.

In contrast, a national population-based study in Zimbabwe by Sambisa et al (2010:180) revealed an inverse association between age and HIV testing.

Young people are likely to respond to programmes conducted by their peers. For example, a study among university students revealed that respondents had undergone VCT because of the influence of peers (Njagi & Maharaj 2006:121).

### **3.7.2.6 Gender**

Gender is also an important factor influencing the use of VCT services. Gender powerfully shapes attitudes towards testing. According to Obemeyer and Osborn (2007:1766), men tend to underestimate their risk to HIV infection than do women, despite reporting more high-risky behaviours and women have more fears about testing than do men. The limited uptake of VCT by men is mainly due to the male ideology of invulnerability and emotional control. For example, in a study among Ugandan and Malawian male youth, participants mentioned not wanting people to begin to think that one was infected, was afraid, or was unsure of oneself as key reasons why they have not and may not seek VCT (Izgubara et al 2009:249).

A study by Kabiru et al (2010:412) among young people in Kenya revealed that a greater proportion of females (64 percent) than males (55 percent) reported an HIV test. Similar findings were reported in Zimbabwe in which the majority of clients presenting for client-initiated VCT were females (79.4 percent) (Chirawu et al 2010:82).

A national population-based survey in Zimbabwe revealed that among those who had been tested, men (53 percent) were more likely than women (33 percent) to voluntarily test for HIV (Sambisa et al 2010:180). The study also revealed that, in contrast, 46 percent of women who had been tested reported provider-initiated testing compared to 27 percent of men.

However different findings on the influence of gender on the use of VCT were reported among youths in Nigeria. A study by Yahaya et al (2010:141) among youths in Nigeria revealed no significant difference in the views of respondents as regards to the factors influencing the use of VCT based on gender.

A study among Ugandan and Malawian male youth revealed that participants were discouraged from seeking VCT services because the providers were mainly women

(Izugbara et al 2009:250). The participants spoke about VCT being a very sensitive service that they did not feel comfortable obtaining from female providers.

### **3.7.2.7 HIV/AIDS-related Stigma and discrimination**

Fear of stigmatisation and discrimination is a major factor influencing acceptability of VCT services. The effects of HIV/AIDS-related stigma and discrimination can be felt on many levels: individual, family, community, programmatic, and societal. They represent obstacles such as preventing individuals from being tested; preventing persons from recognising that they or family members are HIV positive; inhibiting people from seeking care, support, and treatment (USAID 2006:2). According to the *Washington Times* (2008:2), the secretary general of the United Nations, Ban Ki-Moon has this to say:

“Stigma remains the single most important barrier to public action. It is the main reason too many people are afraid to see a doctor to determine whether they have the disease, or to seek treatment if so, it helps make AIDS the silent killer, because people fear the social disgrace of speaking about it, or taking easily available precautions. Stigma is the chief reason the AIDS epidemic continues to devastate societies around the world.”

Recent research clearly shows that there is high level of HIV/AIDS-related stigma and discrimination against those who seek VCT services. As a result, many people are afraid of visiting VCT services because they fear discrimination and isolation from their families and communities (Meiberg et al 2008:53).

A study by Daftary et al (2007:574) among TB patients in South Africa revealed that for patients unaware of their HIV status, felt stigma of HIV/AIDS was a critical disincentive for VCT. Felt stigma concerns the actual experience of discrimination as a result of one's positive HIV status. The study revealed that patients felt that they could suffer a potential double stigma if they receive an HIV positive result.

A study by Okonkwo et al (2007:258) among pregnant women in Nigeria revealed that the fear of discrimination, domestic abuse, or dissolution of their marriage played a key role in their decision to avoid seeking VCT services. Greater than 69 percent of the

women agreed that they would face intense social and cultural discrimination if they tested positive.

A study in Ethiopia among university students revealed that, one of the main factors discouraging VCT uptake was consequences of the test result that might lead in to stigma and discrimination leading to depression and hopelessness (Alemayehu 2010:116).

In a study among Ugandan and Malawian male youth the main reason why many boys did not go for VCT was the fear that they would test positive and then lose their friends and respect (Izugbara et al 2009:249).

A study in South Africa among university students revealed that, the risk of stigma and rejection and a lack of understanding about positive living contribute to university students being unaware of their HIV status (HEAIDS 2010:93). The study revealed that students reportedly fear the outcome of testing and/or seek to delay testing, preferring to wait until either their studies is completed, they decide to marry, or they begin to feel sick.

### **3.8 CONCLUSION**

The chapter presented the literature review used in the study. The aspects of the literature reviewed include the HIV/AIDS epidemic in South Africa and in the South African higher education sector, factors causing university students' susceptibility and vulnerability to HIV/AIDS, the impact of HIV/AIDS in the higher education sector, the advantages, disadvantages, process, principles and the models of VCT, VCT services the South African higher education sector and the factors influencing the use of VCT. The next chapter will undertake a detailed presentation of the research findings.

## **CHAPTER 4**

### **RESEARCH FINDINGS**

#### **4.1 INTRODUCTION**

This chapter presents and discusses the findings of the study. The presentation and discussion of the findings are a crucial part of any research project. It is essential that the discussion and presentation of the findings be systematic, logical, concise and drawn from all the data analysed (De Vos 2005:333).

The chapter begins by presenting the biographical details of the participants. This will be followed by an analysis of main themes, identification of categories and sub-categories, following verbatim transcriptions and coding of the focus group discussions conducted in the study.

#### **4.2 BIOGRAPHICAL DATA**

This section describes the characteristics of the participants who took part in this study. A full description of the attributes which made the participants best suited for the study is given. The demographic information collected includes age, race, gender, marital status and the year of study. All the participants were university students.

**Table 4.1 Demographic data of the participants**

<b>Characteristic</b>	<b>Value</b>	<b>Frequency</b>
<b>Age</b>	21-25	48
	26-30	1
	31-35	0
	36-40	0
<b>Race</b>	African	48
	White	0
	Coloured	1
	Indian	0
<b>Gender</b>	Male	25
	Female	24
<b>Marital status</b>	Single	35
	Married	5
	Co-habiting	9
	Divorced	0
	Widowed	0
<b>Year of study</b>	First year	36
	Second year	4
	Third year	6
	Fourth year	3
	Postgraduate	0

The participants' age range was between 21 and 30 years, with the majority (48) of the participants aged between 21 and 25 years. This age range fell well within the age criteria for inclusion into the study. The majority (48) of the participants were Africans. Only 1 participant was Coloured. There were no Whites and Indians participants in the sample. There were more males (25) than females (24). The majority (35) of the participants were single. 5 of the participants were married and 9 of the participants were co-habiting. None of the participants was divorced or widowed. The majority (36) of the participants were in first year of study. 6 of the participants were in third year of study. Only 4 and 3 of the participants were in second and fourth year of study respectively. None of the participants was at a postgraduate level of study. The participants' demographic variables are summarised in table 4.1 above.

### **4.3 FIELD EXPERIENCE BY THE RESEARCHER**

The researcher did not experience difficulties in entering the research field. A proposal letter was sent to the campus director of residences requesting permission to conduct

the study. The researcher was granted permission by the campus director of residences to conduct the study.

The participants were purposefully selected for the study. The participants were recruited with the help of the campus director of residences and the student representative council. The campus director of residences and the student representative council gave announcement about the study to the students and organised the venue for the study.

The FGDs took four weeks to complete. The first week was spent gaining access to the target population, making initial contacts with informants and conducting the pilot interview. During the initial contacts, issues relating to the purpose of the study, informed consent and ethical considerations such as voluntary participation were discussed. Informants were given the opportunity to ask questions regarding the study at each contact.

Informants were contacted by the researcher the day before the focus group interviews to check if they were still available for the interviews and to obtain further verbal consent. The focus group interviews took place in comfortable and relaxed venue in order to ensure comfort and privacy. The focus group sessions took place in students' residences since the residences were easily accessible to the potential informants.

The venue was prepared before the commencement of the interviews. The chairs were arranged in a circle and the tape recorder was tested beforehand. The documentation that the researcher prepared in advance of running a focus group includes: the letter of invitation to informants, an ethical clearance letter from UNISA, a letter of permission from the university of Free State to conduct the study, a very brief outline of the research and what informants could expect from the session, and the questions to be addressed by the group.

At the start of the FGD, the researcher introduced himself to the research participants and explained the reason why they were selected for the study. He further explained to the participants the purpose, objectives, ethical considerations of the study. The researcher gave the participants a research consent form which contained the purpose of the study and rights of participants in terms of (1) anonymity, (2) confidentiality, (3)



voluntary participation and (4), the right to withdraw their participation in this study at any stage if they wished to do so. The participants were then subsequently given the opportunity to sign consent forms giving permission to the researcher to interview them while using a tape recorder during FGD. The researcher asked the participants a *grand tour* question entitled: **What factors influence the use of VCT by university students?** Subsequent probing questions were then asked in order to dig deeper into the factors influencing the use of VCT by university students. The researcher also took field notes during the FGD.

Data transcriptions were done at the end of each FGD and one FGD was conducted per day for the purpose of transcription. The audiotapes of the interviews were transcribed verbatim for analysis. These transcripts were in English since the interviews were conducted in English. At the end of FGDs, the researcher read and re-read the transcription to determine meaning and any differences between the respective participant's descriptions of their views. No differences were found in their description and data saturation occurred in the fifth FGD. The themes that emerged during data collection and analysis are discussed below.

#### **4.4 OVERVIEW OF THE THEMES FROM THE FGDS**

Three major themes emerged from the data namely: (1) facilitators to the uptake of VCT services by university students, (2) challenges to the uptake of VCT services by university students and (3) suggestions to improve the uptake of VCT services by the university students. Categories and sub-categories emerged from the initial data analysis, which were then clustered together to form the main themes, which will be presented below.

##### **4.4.1 Facilitators to the uptake of VCT services by university students**

The facilitators to the uptake of VCT services by university students were a recurring theme amongst the participants. During the FGDs participants were willing to give as complete picture as possible of their reasons for seeking VCT services. These included: the desire to know one's HIV status, illness, pregnancy, blood donation, to get a reward, the influence of significant others, the influence of media, awareness campaigns, forced

to do so, to get a job, curiosity, to be a positive role model and the positive attitude and professional conduct of the health care provider.

**Table 4.2 Summary of the themes, categories or sub-categories**

THEMES	CATEGORIES/SUB-CATEGORIES
4.4.1 Facilitators to the uptake of VCT services by university students	<ul style="list-style-type: none"> <li>• desire to know one's HIV status</li> <li>• illness</li> <li>• pregnancy</li> <li>• blood donation</li> <li>• to get a reward namely; kits, bags, and memory sticks</li> <li>• influence of significant others namely; friends and parents</li> <li>• influence of media</li> <li>• curiosity</li> <li>• positive role models</li> <li>• forced to go for VCT</li> <li>• obtaining a job</li> <li>• positive attitude and professional conduct of the counsellor</li> </ul>
4.4.2 Challenges to the uptake of VCT services by university students	<ul style="list-style-type: none"> <li>• fear of being diagnosed HIV positive</li> <li>• HIV/AIDS-related stigma and discrimination</li> <li>• low perception of risk to HIV infection</li> <li>• lack of friendly VCT services</li> <li>• inaccessibility of VCT services</li> <li>• shortage of human and infrastructural resources</li> <li>• long queue at the VCT centre</li> <li>• long waiting period for test results</li> <li>• negative perceptions about VCT</li> <li>• pre-test counselling</li> <li>• ignorance</li> </ul>
4.4.3 Suggestions to improve the uptake of VCT services by the university students	<ul style="list-style-type: none"> <li>• increased resources allocation namely: human resources, infrastructure and incentives</li> <li>• increased awareness campaigns</li> <li>• improved counselling</li> <li>• making VCT services more accessible</li> </ul>

#### **4.4.1.1 *The desire to know one's HIV status***

Going for VCT because of the desire to know one's HIV status was reported as one of the important factors influencing the decision to undergo VCT. Some of the participants went for VCT because they wanted to know their HIV status in order to safeguard their health and the health of others as one participant from focus group B puts it:

B7: "I went there to know my status and stay healthy and if I know that I'm negative I know that I have to take care more of myself and if I'm positive I know that I don't have to spread it".

Some participants went for VCT because they wanted to know 'where they stand' because in the past they were involved in risky behaviours such as touching human blood and cutting oneself by a razor blade that has been used by others. Other participants stated that they went for VCT because they wanted 'to know that at least they do not have to worry about this thing that they were HIV positive or not'. Participants also stated that they went for VCT because they would get help in the form of support groups if they found out that they are HIV positive.

#### **4.4.1.2 Illness**

Another category describing reasons for seeking VCT included those to deal with illness. Some participants went for VCT after falling sick, so they wanted to confirm whether they had HIV or not. Emphasising going for VCT due to illness one participant from focus group C had this to say:

C8: "... I felt very, very sick, I got flue but this one (pause) ... I had to confirm whether I had HIV or not".

#### **4.4.1.3 Pregnancy**

The FGDs revealed that going for VCT as a result of pregnancy was an important factor for seeking VCT. Some participants were tested because when they were pregnant the health care professionals recommended them to do so. Others they went for VCT because they wanted to protect their unborn babies as one participant from focus group E put it:

E3: "I was pregnant so I wanted to protect my baby, yes".

#### **4.4.1.4 Blood donation**

The FGDs also revealed that participants had gone for VCT because they wanted to donate blood. Emphasising blood donation as a factor for seeking VCT, one participant from focus group A had this to say:

A8: "... I'm a blood donor, and when you want to donate blood, they test you first before you donate the blood".

#### **4.4.1.5 To get a reward**

Going for VCT in order to get a reward was an important factor for seeking VCT in this study. The participants revealed that they went for VCT in order to get rewards such as kits, bags and memory sticks as participant from focus group A puts it:

A7: "... they were also giving out the kit, the bag and everything, (laughing)ha ha ha".

#### **4.4.1.6 The influence of significant others**

The narratives also revealed that participants had sought VCT due to the influence of significant others such as friends and parents. Clarifying the influence from significant others as the reason for seeking VCT, a participant from focus group B had this to say:

B6: "I did it because my friends were doing it".

#### **4.4.1.7 The Influence of the media**

Other participants went for VCT due to the influence of the media as one participant from focus group D puts it:

D4: "I have done nothing. (Group members laugh). No like everybody will always get it right though media like as a young adult growing you need to know your status, you need to know where you stand".

#### **4.4.1.8 The influence of awareness campaigns**

The FGDs revealed that other participants had gone for VCT due to the influence of awareness campaigns as one participant from focus group C puts it:

C2: “For me it was during the campaign of the circumcision that before you are circumcised you should know your status”.

#### **4.4.1.9 Curiosity**

Another important category describing the reasons for seeking VCT includes those to deal with curiosity. Other participants had gone for VCT because they wanted to experience the process of VCT rather than getting it from others. Emphasising curiosity as a reason for seeking VCT, a participant from focus group E had this to say:

E7: “For me I went there just to experience. The first time I went there for experience, I went with my cousin. People will always tell us this; counselling thing will always flick u out, will flick u out. So me and my cousin we decided that we must go there and test and then we tested”.

#### **4.4.1.10 Positive role models**

Another mentioned reason for seeking VCT is that participants went there in order to be positive role models. They went for VCT because they wanted ‘to set an example to their peers and to encourage everybody to go’

#### **4.4.1.11 Forced to Go for VCT**

The FGDs revealed that other participants did not go for VCT at their own free will or own volition. They went for VCT because they were forced to do so as illustrated by an extract of one participant from focus group A:

A3: ‘... my mum, she actually ... (pause). I know it’s illegal what she did, if I can report her, she can get arrested she forced me to go and get tested.

#### **4.4.1.12 Obtaining a job**

Another category describing the reasons for seeking VCT includes that to deal with obtaining a job. Other participants mentioned that they went for VCT in order to be admitted for a job. They mentioned that in order to be admitted for certain types of job they had to undergo VCT as part of the screening process of a particular job. Emphasising this point a participant from focus group B had this to say:

B8: "It was defence force training as you know that before you are admitted, you have to do HIV testing, you have to be performed physically body checks and to see if you are emotionally fit. That's when I decided to go for HIV testing".

#### ***4.4.1.13 The positive attitude and the professional conduct of the counsellor***

The FGDs revealed that another important reason for seeking VCT was due to the positive attitude and the professional conduct of the counsellor. The participants mentioned that the counsellors who conducted the VCT were experienced, supportive and understanding. They emphasised that this positive attitude and professional conduct of counsellors made them to 'realise that getting tested is the right thing to do'. Illustrating this point a participant from focus group E had this to say:

E8: "Yah the lady who was doing the counselling, she was very supportive and understanding. She knew what she was doing. She was not like you ... (pause) just graduated people who do not know what they were doing. She got the experience and she said it's not the end of the world, you know she was comforting and then you realise ukuthi (that) you know what getting tested is the right thing I want to do".

#### **4.4.2 Challenges to the uptake of VCT services by university students**

The challenges to the uptake of VCT services by university students were also an important theme obtained from the FGDs. This theme describes the reasons put forward by the participants against seeking VCT services. The FGDs revealed that there were several factors against seeking VCT services namely: the fear of being diagnosed HIV positive, HIV/AIDS-related stigma and discrimination, the low perception of risk to HIV infection, the lack of friendly VCT services for students, the shortage of counsellors /nurses, the inaccessibility of VCT services, the long waiting period for test results,

negative perceptions towards VCT, the problems with pre-test counselling and ignorance.

#### **4.4.2.1 *The fear of being diagnosed HIV positive***

The uptake of VCT by university students was mainly constrained by the fear of being diagnosed HIV positive. The FGDs revealed that participants were afraid of the consequences they would face if they are diagnosed HIV positive. The participants mentioned that they would get stressed and commit suicide if they find out that they are HIV positive. They also mentioned that a positive diagnosis will destroy their long term plans such as studying, getting married and starting a family. This means that the participants equated a positive diagnosis of HIV with death sentence. The participants also associated VCT uptake with stoppage of sexual activity. They mentioned that they would not go for VCT because they may be told to stop sexual activity. Not seeking VCT due to the fear of being diagnosed HIV positive is well illustrated by what a participant from focus group C had to say:

C8: "The reason is the fear of knowing. Knowing that you are HIV positive, I also believe knowing can kill you than not knowing. Because when you know you gona die, you die. I know I gona die one day but I know not anytime soon (Group members laugh). But if you are HIV positive, it's like if I will be told that I'm HIV positive I know soon I gona die and then I know that dying process will be sooner. So I think not knowing it's cool. When you don't know you don't die".

#### **4.4.2.2 *HIV/AIDS-related stigma and discrimination***

Participating university students were discouraged from seeking VCT services due to HIV/AIDS-related stigma and discrimination. The FGDs revealed that HIV/AIDS-related stigma and discrimination was still prevalent among the participants. The participants were afraid to go for VCT because they feared rejection and isolation by friends and family members. For this reason participants mentioned that they did not feel comfortable to be tested by known people. They mentioned that it was better to be tested by strangers because 'strangers will not judge them' and will not violate their privacy by 'spreading their HIV status to friends, family members and others'. Furthermore, the participants preferred to be tested outside the university because 'at the university the rumour will spread fast and outside the university nobody knows

them'. The participants also preferred to be tested outside the university because they feared that their studies will be disturbed if they are tested at the university if their results came positive. The participants mentioned that they were afraid to go for VCT because of the fear of being judged and labelled if they are found HIV positive. The FGDs revealed that felt stigma of HIV/AIDS was still prevalent amongst the participants and that it was a critical disincentive for VCT uptake. Felt stigma concerns the actual experience of discrimination as a result of one's positive HIV status. Emphasising this point, other participants mentioned that when you are HIV positive if 'people do not isolate you, you are going to isolate yourself'.

There was a common consensus among the participants that HIV/AIDS-related stigma and discrimination is a major barrier for the uptake of VCT services as one participant from focus group B elaborates:

B8: "I think most people avoid VCT because most people they are afraid of being told that; you have done that and that. It's like the story that you have done before, that you have done this and that; you are having unprotected sex, all the stuff. They think that if ever they go there they are going to be told such stories". (Group members say "wow").

The other group members agreed with what this participant said by saying, 'wow' meaning that the participant had raised an important point that all the group members were in agreement with.

#### ***4.4.2.3 The low perception of risk to HIV infection***

The low perception of risk to HIV infection was also mentioned as barrier for seeking VCT. The participants mentioned that they felt no need for seeking VCT services because they were not engaging themselves in activities that renders one risky of acquiring HIV such as 'touching someone's blood and engaging in unprotected sexual activities'. In addition they also mentioned that they did not see the need to seek VCT services because they were not yet having the symptoms of HIV. They also mentioned that they did not see the reason to seek VCT because they already know the HIV statuses of their partners. Elaborating the low perception of risk to HIV infection as a barrier for seeking VCT a participant from focus group C had this to say:



C1: “The other reason I have that, (pause)I have a mentality when you have HIV or anything you have the symptoms like I did biology at school so I know the symptoms of HIV. So because I don’t have those symptoms I don’t feel like going because I’m like no, why should I go when I don’t have the symptoms of HIV. And when my partner has tested, why should I?”

#### **4.4.2.4 *The lack of student-friendly VCT services***

The participants reported that university students were sometimes dissuaded from going for VCT because the VCT services were not friendly to them. They stated that they were afraid of going for VCT because the people who conducted the VCT were old, and as a result they felt uncomfortable to discuss sensitive issues with them during counselling. They suggested that it could be better if VCT is provided by their peers. They also suggested that VCT providers need to be innovative in order make VCT services student-friendly. Their suggestions include: making VCT awareness campaigns more entertaining and using role models who are living with the virus to motivate the students. The lack of student-friendly VCT services as a barrier for VCT uptake is illustrated by what a participant from focus group D had to say:

D6: “If they have more young people there than now because obviously if there are old people I can’t go there. (Group members laugh).How can I talk to old people about.... (pause) my status?”

#### **4.4.2.5 *The inaccessibility of VCT services***

Evidence from the present study also suggests that the uptake of VCT by university students is deterred by the inaccessibility of VCT services. The participants were aware of the existence of VCT services at the university but they complained that the services were ‘too far and too hideous’ for access by university students. The participants added that the inaccessibility of the VCT centre at the university makes only few students to attend it. In elaborating this point a participant from focus group B had this to say:

B1: “Okay, I think they must bring it closer to the students because like some of them they are too hideous, they are too hideous like now our VCT is ... (pointing) one in the clinic and something like that, of which is under the library. Some of the students don’t even know. People just think it’s a room or office, they don’t even

know that there is a VCT or what. So I think they must try to bring them closer to the students”.

#### **4.4.2.6 *The shortage of human and infrastructural resources***

Another reported reason why university students do not go for VCT is the shortage of human and infrastructural resources namely: the shortage of counsellors/nurses and the shortage of counselling rooms. The participants mentioned that they were willing to go for VCT but one factor that discouraged them was that the university’s VCT facility had only one nurse and she was not always available. The shortage of counsellors/ nurses to offer VCT services made long queues outside the VCT facility as students waited patiently to be tested. Driving this point home a participant from focus group A had this to say:

A5: “I think there should be more counsellors; it’s like for now there is only one counsellor and she is hardly available most of the times. If they could like extend the offices and have more counsellors that will be better. Sometimes you go there; you want to test and only to find out that the nurse is not available”.

The uptake of VCT by university is also constrained by the shortage of VCT rooms. The FGDs revealed that the reason participating university students did not attend VCT was because there was only one VCT room at the university where all students went for HIV testing. This compromised their right to privacy and confidentiality as they did not want to be seen by other students going for VCT. Being seen at the VCT centre would make other students to suspect that they are HIV positive. Hence the participants suggested that they should be many VCT rooms at the university where students go and test. The shortage of VCT rooms would create the problem of long queues as students waited outside to be tested. Driving home the shortage of VCT rooms as a barrier to VCT uptake a participant from focus group D had this to say:

D6: “I think also there should be a lot of place where people can go and test not only at one place, not only at one place when they say HIV testing only. Okay, I think it should be like just plain clear nobody will know that she is going there to be tested; they can just be curious maybe she is going to test for HIV. Like people will not know what you are going to do in the clinic”.

#### **4.4.2.7 *The long queue at the VCT centre***

The FGDs revealed that the students were willing to seek VCT but one factor that hindered them from doing so was the long queue at the university's VCT centre. The participants mentioned that there were long queues of students seeking VCT at the university's VCT centre. In addition, they also said that one had to make an appointment before he or she is tested and this discouraged them. They said that the counsellor / nurse would tell them to come back for testing after one week and by that time they would have changed their minds. Driving this point home two participants from focus group A had this to say:

A4: "The other thing is that they should avoid the long queues; maybe they should bring about VCT to the hostels to test. It's like I went there and stand for an hour till I said 'no' I can't stand anymore".

A2: "It's like you lose your nerves when you go there, you tell yourself, you encourage yourself and when you go there you start discouraging yourself because of the long queues".

#### **4.4.2.8 *The long waiting period for the test results***

Going by the information elicited, another barrier to VCT uptake by university students is the long waiting period for the test results. The participants were concerned about the waiting period for the test results which they described as too long. This long waiting period made them scared as they did not know the outcome of the test whether it would come positive or negative. They suggested that it would be better if the test results 'just come instant'. Emphasising the issue of the long waiting period for the test results as a barrier to VCT uptake a participant from focus group E had this to say:

E7: "The way you wait, the way you will be told about the results. It's like they have taken a very, very long time. The way you wait it's like oh my God, you will like waiting and fear just built up, built up, built up and then when they finally come at least then you have to say at least they are back now and then when you are negative yes, you are relieved. But then the waiting ..." (Other group members interrupts by saying; "the waiting get you scared, just waiting").

There was a general consensus among the participants that the long waiting period for the test results is a key barrier to VCT uptake as evidenced by what the other group members said in support of what participant E7 said. They said:

“the waiting get you scared, just waiting”.

#### **4.4.2.9 Negative perceptions towards VCT**

Another hindering factor to VCT uptake by university students in this study was the negative perceptions that the participants had towards VCT. The perception that one has to bring his or her needle when going for VCT hindered other university students from seeking VCT. Other participants perceived VCT as painful and this hindered them from seeking VCT. These were the negative perceptions that they held despite them not having gone to the VCT in order to verify the facts. Illustrating this point of negative perceptions towards VCT as a barrier to VCT uptake a participant from focus group C had this to say:

C3: “Me I was seriously scared. (shaking his head).First of all taking the blood samples ha shi (shaking his head and waving his hands) I’m allergic to those things. And about knowing my status, if there was another easy way which I believe could not be painful of taking blood samples then no problem. (shaking his head). I haven’t tried testing, injection, no, I know them they are very painful”.

#### **4.4.2.10 Pre-test counselling**

The other important barrier to VCT uptake that featured in the FGDs was the issue of pre-test counselling. The other participants mentioned that they had gone for VCT but were discouraged from testing due to pre-testing counselling. They suggested that it would be better if the counsellors ‘start by testing, getting to the status and then counselling.’ The issue of pre-testing as a barrier to VCT uptake by university students is demonstrated by what a participant from focus group A had to say:

A7: “Because the pre-test counselling discourages people. One of my friends went there and then they started counselling and she decided not to test because of the questions what you gona do, this and this and all that”.

#### **4.4.2.11 Ignorance**

Participating university students were discouraged from seeking VCT due to ignorance as participant from focus group E puts it:

E2: "...You know almost everything about HIV, you are just ignorant, you don't wana get tested because for whatever reason that you don't wana get tested but at the end of the day people... I think people don't get tested because they are ... just ignorant".

#### **4.4.3 Suggestions to improve the uptake of VCT services by the university students**

This theme describes participants' suggestions to improve the uptake of VCT services. This theme is important because participants made suggestions based on their experiences. Four main categories were identified within this theme, describing how the uptake of VCT by university students could be improved. The categories identified include: (1) increased resources allocation, (2) increased awareness campaigns, (3) improved counselling and (4) making VCT services more accessible.

##### **4.4.3.1 Increased resources allocation**

The increased resources allocation was a recurring category that cut across all the FGDs. Within this category three main subcategories emerged namely: human resources, infrastructure and incentives.

##### **4.4.3.1.1 Human resources**

The FGDs revealed that VCT uptake could be improved by increased allocation of human resources. The participants mentioned that the shortage of nurses/counsellors to provide VCT services was a major factor hindering VCT uptake by university students. The FGDs revealed that there was only one nurse/counsellor at the university providing VCT services to students. The participants complained about the non-availability of this one nurse/counsellor 'most of the times'. Hence the participants suggested that VCT

uptake by university students could be improved by employing more nurses/counsellors to provide VCT services, as participants from focus group A and E put it:

A5: "I think there should be more counsellors; it's like for now there is only one counsellor and she is hardly available most of the times. If they ... have more counsellors that will be better. Sometimes you go there; you want to test and only to find out that the nurse is not available".

E7: "What she is saying its true maybe they should hire a lot of nurses so that they could change not just one person testing each and every student here, they should change maybe have a routine or maybe hire the nurses from the hospitals around QwaQwa ...".

The participants also mentioned that VCT uptake could be improved by recruiting peer educators to provide VCT. The FGDs revealed that university students could feel more comfortable if VCT is provided by their peers as illustrated by an extract of a participant from focus group D:

D6: "If they have more young people there than now because obviously if there are old people I can't go there. (Group members laugh). How can I talk to old people about.... (Group members laugh)...my status? How would I speak to them to be prepared for that because ...?"

The participants also stated they could feel encouraged if the university invites 'celebrities' who are living with the virus to come and talk to them about the importance of knowing one's status.

#### ***4.4.3.1.2 Increased infrastructure***

Participating university students suggested that VCT uptake could be improved by increased infrastructure. The participants complained that there was only one VCT room at the university and this hindered them from seeking VCT as they feared to be seen by other students at the VCT room. They suggested that there should be many VCT rooms at the university in order to encourage students to go for VCT. Driving this point home, a participant from focus group D had this to say:

“D6: “I think also there should be a lot of places where people can go and test not only at one place, not only at one place when they say HIV testing only ...”.

#### **4.4.3.1.3 Incentives**

The other suggestion to boost VCT uptake put forward by participants was the giving of incentives (such as free memory sticks, free televisions and free laptops) to university students in order to encourage their attendance for HIV testing. Elaborating this point a participant from focus group A had this to say:

A8: “I think the like that happened last time, come and get tested and get a memory stick, it was the best! It was like I wana go there and get my consolation prize”.

#### **4.4.3.2 Increased awareness campaigns**

The other important category that was representative of all the FGDs was the use increased awareness campaigns in order to boost VCT uptake. The participants suggested that VCT uptake by university students could be improved by increased awareness campaigns about VCT. The participants stated that the other reason for not seeking VCT was that they were not fully aware of its existence, purpose and use. They mentioned that awareness campaigns would make university students aware of the existence, purpose and use of VCT. Driving this point home, a participant from focus group D had this to say:

D6: “Firstly right now we haven’t been told about it, they have been passive about VCT. We only find out a day before they come to us. So if that’s the case we only go when they come to us. We can’t go to them because we don’t know it’s there. I only find just now we have got that thing here. So yah they have to come to us so that we can go to them”.

#### **4.4.3.3 Improved counselling**

Going by the information elicited, VCT uptake by university students could be boosted by improved counselling. The participants suggested that counsellors should provide a comfortable environment for testing by ‘making jokes and having a television set’ in the

counselling room. They suggested that these measures would ‘enlighten the mood’ during VCT. Illustrating this point a participant from focus group A had this to say:

A2: “Like it should lighten the mood, if they have things like when you go there like when you are waiting for the results maybe they should have a television set, sharing some jokes and something like that you know, just to enlighten”.

Furthermore, the participants suggested VCT uptake could be boosted by post-test and follow-up counselling after a person has known his or her status as participant from focus group E puts it:

E5: “Okay before it comes to me I would suggest that there is counselling after you find out your status, I actually advise that there should be more counselling after that like you should go to that, not necessarily to that place you have been before maybe you can go to the psychologist or something to talk to for the whole month before to be ... (pause) okay maybe for a week to get into that zone where you are comfortable okay I’m positive then I’ll go to my family and explain actually I’m positive, this is what happened”.

#### **4.4.3.4 *Making VCT services more accessible***

The other recurring category obtained from the FGDs was making VCT services accessible in order to boost their uptake. The participants complained that the VCT facility at the university was ‘too hideous’ for the reach of many students. They said that very few students knew that there were VCT services at the university because they were hardly visible. The participants suggested that VCT services uptake could be boosted by making them more accessible to university students as one participant from focus group A puts it:

A3: “They should put VCT somewhere we all go for instance DH (dining hall). We all go there and you will see VCT and then I have to go there”.

## **4.5 CONCLUSION**

This chapter presented the findings of the study. Demographic data of the participants was presented first. This was followed by presentation and analysis of data from the



FGDs and field notes using thematic analysis. The next chapter will present the discussions, limitations, recommendations and conclusions of the study.

## **CHAPTER 5**

# **DISCUSSION, LIMITATIONS, RECOMMENDATIONS AND CONCLUSIONS**

### **5.1 INTRODUCTION**

This chapter discusses the findings of the study with reference to the relevant literature and information obtained from other studies. The literature review was used for quality control purposes in order to contextualise, compare and inform conclusions of the current study (Flick 2009:49). The literature review therefore guided the discussion of the main themes identified from the data analysis. The chapter also highlights the limitations, provides recommendations and makes conclusions of the study.

### **5.2 DISCUSSION**

This section discusses the findings of the study with reference to the relevant literature and information obtained from other studies. The discussion of the findings is based on three themes that emerged during data collection.

Emerging themes from the study indicate that participants in this study sought VCT services due to various reasons namely: the desire to know one's HIV status, illness, pregnancy, blood donation, to get a reward, the influence of significant others, the influence of media, awareness campaigns, forced to do so, to get a job, curiosity, to be a positive role model and the positive attitude and professional conduct of the health care provider. Outcomes of the study also revealed that participants were discouraged from seeking VCT services due to: the fear of being diagnosed HIV positive, HIV/AIDS-related stigma and discrimination, the low perception of risk to HIV infection, the lack of student friendly VCT services, the shortage of human and infrastructural resources, the inaccessibility of VCT services, the long waiting period for test results, negative perceptions towards VCT, the problems with pre-test counselling and ignorance. Going by the participants' suggestions VCT services uptake by university students could be improved by increased resource allocation (incentives, human and infrastructural

resources), increased awareness campaigns, improved counselling and making VCT services more accessible.

### **5.2.1 Facilitators to the uptake of VCT by university students**

Participants reported various reasons for seeking VCT services. They reported that they sought VCT services due to: the desire to know one's HIV status, illness, pregnancy, the influence of significant others, the influence of media, the influence of awareness campaigns, curiosity and the positive attitude and professional conduct of the counsellors. The other reported reasons for seeking VCT services include: need to donate blood, to get a reward, to be positive role models, to get a job and being forced to do so.

In terms of the facilitators to the uptake of VCT services by Free State University students these findings of the study were similar to those obtained from other studies, for example; the desire to know one's HIV status, the encouragement from friends, the hope of receiving incentive, concern for one's own health, marital aspirations and the prerequisite for entering a long term relationship are reported as reasons for seeking VCT (Chirawu et al 2010:85; Kabiru et al 2010:412; Njagi & Maharaj 2006:121). The other reasons for seeking VCT identified in the literature were health complaints, reconfirmation of a previous HIV-test, pregnancy, marriage, new relationship, having had unsafe sex and the availability of medication to treat HIV positive people that motivate people towards seeking HIV testing (Meiberg et al 2008:53; Sivaram et al 2008:436). The other reasons for HIV testing identified in the literature include: being required to have the test by, for example, health provider-initiated HIV testing (Mugisha 2008:93). Perceived susceptibility towards contracting HIV/AIDS and the belief that VCT leads to better health care are also associated with willingness towards seeking VCT services (Abebe & Mitikie 2009:152; Yahaya et al 2010:139). Furthermore, a history of sexual risky behaviour and the HIV-positive status of spouse are reported factors associated with willingness towards seeking VCT (Vajpayee et al 2009:828).

However, some of the facilitators identified in previous studies including the perceived susceptibility towards contracting HIV/AIDS, the belief that VCT leads to better health care, the history of sexual risky behaviour, the HIV-positive status of spouse, marital aspirations, marriage, the prerequisite for entering a long term relationship,

reconfirmation of a previous HIV-test, having had unsafe sex and the availability of medication to treat HIV positive people were not identified as some of the reasons for undergoing the HIV test among participants in this study.

### **5.2.2 Challenges to the uptake of VCT services by the university students**

In terms of the challenges to the uptake of VCT services by the participants, the fear of being diagnosed as HIV positive was a major barrier towards seeking such services in this study. The participants equated being diagnosed as HIV positive with a death sentence. Some mentioned that they would get stressed and commit suicide if they found out that they are HIV positive. They also mentioned that a positive diagnosis will destroy their long-term plans such as studying, getting married and starting a family. Similar findings were reported in a study among secondary school learners in the Free State Province, in South Africa which revealed that participants did not go for VCT because of the fear of testing positive for HIV, fear of dying and thoughts of suicide (Botma et al 2007:53).

The low perception of the risk of HIV infection was another reported barrier for seeking VCT in this study. A study in Nigeria among college students identified the low perception of risk of HIV as barrier for seeking VCT (Ijadunolo et al 2007:134). Ijadunolo et al's study revealed that the majority of the respondents (85 percent) perceived themselves to be at a little or no risk of HIV infection, despite a high prevalence of HIV risky indicators among them such as a recent history of unprotected sex, past history of STI and having multiple sexual partners. The same study by Ijadunolo et al (2007:134), revealed that only 5 percent of the participants had utilised VCT services. Similar findings were also reported in a study among Ugandan and Malawian male youth (Izugbara et al 2009:248). The critical and commonly mentioned reason given by respondents in the study of these authors for not seeking VCT services was that they were sure that they were uninfected, even though they themselves frequently admitted to regularly 'walking badly' (engaging in risky sexual practices).

Participating university students in the present study were discouraged from seeking VCT services due to HIV/AIDS-related stigma and discrimination. The effects of HIV/AIDS-related stigma and discrimination can be felt on many levels: individual, family, community, programmatic, and societal. They represent obstacles such as

preventing individuals from being tested; preventing persons from recognising that they or family members are HIV positive; inhibiting people from seeking care, support, and treatment (USAID 2006:2). Research clearly shows that there is high level of stigma and discrimination against those who seek VCT services. As a result, many people are afraid of visiting VCT services because they fear discrimination and isolation from their families and communities (Meiberg et al 2008:53). This was also highlighted in a study conducted in Ethiopia among university students which revealed that one of the main factors discouraging VCT uptake was consequences of the test result that might lead in to stigma and discrimination leading to depression and hopelessness (Alemayehu 2010:116). Another study conducted among 21 South African higher education institutions offering contact tuition revealed that, the risk of stigma and rejection contribute to university students being unaware of their HIV status (HEAIDS 2010:93). The participants in the current study mentioned that they did not feel comfortable being tested by people known to them. Such findings are congruent with results obtained from a study conducted in rural Zimbabwe, which revealed that clients preferred testing personnel who come from outside their communities (Chirawu et al 2010:85).

The present study also revealed that participants were discouraged from seeking VCT services due to the lack of student-friendly VCT services. The university students stated that they were afraid of going for VCT services because the people who conducted the VCT were old, and as a result they felt uncomfortable discussing sensitive issues with them during counselling. For this reason, they suggested that it could be better if VCT is provided by other students called peer educators. The findings of this study are in line with those of a study conducted by Ireri et al (2012:4) among youths in selected rural locations in Kenya which revealed that participants were discouraged from seeking VCT services due to the lack of youth-friendly VCT services. Again in a study conducted among university students in Ethiopia revealed that participants preferred VCT services to be rendered in youth clubs (Alemayehu 2010:116).

Another reported barrier for VCT uptake in the present study is the inaccessibility of VCT services. Participating university students were aware of the existence of VCT services at the university but they complained that the services were 'too far and too hideous' for access by themselves. A study among Ugandan and Malawian male youth revealed that young people were discouraged from seeking VCT services because they were usually out of the physical reach to them (Izugbara et al 2009:251). The study by

Hutchinson and Mahlalela (2006:450) on the utilisation of VCT in the Eastern Cape, in South Africa also revealed that the physical proximity to a clinic increased the probability that males would be tested; every one-kilometre in distance that a man lives from a clinic offering VCT reduces by 0.7 percent the likelihood that he will be tested. For women, each additional kilometre was associated with a 0.4 percent reduction in the likelihood of being tested. There is need to make VCT services more accessible in order to boost their uptake.

In this present study, the shortage of human and infrastructural resources is a barrier for seeking VCT services. The participants mentioned that they were willing to go for VCT but one factor that discouraged them was that the university's VCT facility had only one nurse and she was not always available. They also mentioned that they did not seek VCT because there was only one VCT room at the university where all students went for HIV testing. Similarly, a study in South Africa revealed that inadequate human resources inadequate counselling rooms, insufficient testing facilities, and a lack of educational materials discouraged people from seeking VCT services (Mavhandu-Mudzusi et al 2007:256). It is further reported that South Africa is experiencing a chronic shortage of key health professional cadres vital to VCT service delivery (Wadee & Khan 2007:142). Therefore adequate human and infrastructural resources should be put in place in order to boost the uptake of VCT services by university students.

Another barrier to VCT uptake among university students in the present study is the long waiting period for the test results. Studies have shown that with delayed results, the percentage of the population agreeing to be tested frequently reaches 80 percent or 90 percent, but the percentage who returns to get their results is much lower, around 60 percent of those who get tested (Obermeyer & Osborn 2007:1764). In a South African study by Hutchinson and Mahlalela (2006:450), it is reported that HIV rapid testing appears to increase HIV testing uptake. The study revealed that the presence of rapid testing, for example, doubled the likelihood that a man would be tested for HIV from 11.4 percent to 22.2 percent. This is due to the decrease in waiting time, thus reducing the problem of losing clients to follow up. Therefore efforts to shorten the waiting period for test results, such as the use of rapid HIV testing should be encouraged in order to boost VCT uptake by the university students.

The other important barrier to VCT uptake that featured in the narratives was the issue of pre-test counselling. Other participants mentioned that they had gone for VCT but were discouraged from testing due to pre-testing counselling. They suggested that it would be better if the counsellors 'start by testing, getting to the status and then counselling.' According to Obermeyer and Osborn (2007:1768), where health systems are weak and resources limited, health care providers may have insufficient training and their workloads maybe so heavy that they do not find the time or space for counselling. The health care providers should be adequately trained so that they offer quality VCT services to clients.

The other hindering factor to VCT uptake by university students in this study was the negative perceptions that the students had towards VCT. The perception that one has to bring his or her needle when going for VCT hindered other university students from seeking VCT. Other participants perceived VCT as painful and this hindered them from seeking VCT. These were the negative perceptions that they held despite them not having gone to the VCT in order to verify the facts. A study by Njagi and Maharaj (2006:155) among students at the University of KwaZulu-Natal revealed that students were discouraged from seeking VCT services due to the negative perceptions they hold towards VCT. The students perceived that HIV testing was only for the ill. These negative perceptions may discourage some healthy people who want an HIV test from seeking it.

Ignorance was highlighted as an important barrier to VCT service uptake in this present study. Ignorance prevents people from knowing where VCT services could be obtained and also from understanding the purpose and importance of VCT services. These findings are similar to the results obtained elsewhere. For example, the awareness of a place nearby where one could be tested for HIV is associated with knowledge of HIV status (Peltzer et al 2009:174). Furthermore, one of the most powerful reasons to get tested is the knowledge that there is appropriate support, and treatment is available if the test is positive (Yahaya et al 2010:139). Thus the knowledge about VCT is an important factor affecting the use of VCT services.

The other important barriers to VCT uptake mentioned in the literature were: the negative attitude of health care workers (Angotti et al 2009:2269; Daftary, Padayatchi & Padilla 2007:573), the unaffordability of VCT services (Izugbara et al 2009:251), lower

educational level (Kabiru et al 2010:412; Okonkwo et al 2007:257; Peltzer et al 2009:174; Vajpayee et al 2009:831), age (Sambisa et al 2010:180) and gender (Chirawu et al 2010:82). However, in this study, the negative attitude of health workers, the unaffordability of VCT services, the lower educational level, age and gender were not the reasons against seeking VCT services.

### **5.2.3 Suggestions to Improve the Uptake of VCT services by the university students**

Regarding suggestions to improve the uptake of VCT services, participants gave their views in relation to the strategies that should be implemented to boost the uptake of VCT services by university students. Their recommended measures included: increased resources allocation, increased awareness campaigns, improved counselling and making VCT services more accessible. These findings are congruent with the results obtained from other studies.

Research has shown that VCT uptake is high in places with well-resourced VCT services (Sambisa et al 2010:174). Therefore, increased allocation of infrastructural and human resources in VCT centres in order to boost VCT uptake becomes paramount.

The provision of VCT in locations and in conditions that are convenient to clients such as at workplaces, health facilities, schools, higher education institutions have been shown to increase utilisation (Obermeyer & Osborn 2007:1769). Such approaches to increase VCT utilisation include: the use mobile VCT, home-based VCT and provider-initiated VCT (Matovu & Makumbi 2007:1316).

The use of peer counsellors to offer VCT services has been shown to improve uptake. Young people are likely to respond to programmes conducted by their peers. For example, a study among university students revealed that respondents had undergone VCT because of the influence of peers (Njagi & Maharaj 2006:121).

Increased awareness campaigns about VCT through a wide range of engaging student-led prevention activities including drama groups, residence workshops, media and marketing projects, marches, games, poetry slams and community outreach boosted VCT uptake by university students (HEAIDS 2010:101).



Evidence from the current study suggests that VCT uptake by university students can be boosted by improved counselling. The participating university students mentioned that the counsellors who conducted the VCT were experienced, supportive and understanding and this motivated them to seek VCT. Research has also shown that poor counselling discourages people from seeking VCT (Daftary et al 2007:573).

### **5.3 LIMITATIONS TO THE STUDY**

The key limitations to the present study include that it relies only on data collected from university students at the University of Free State, QwaQwa campus. Some of the students refused to participate in the study due to lack of knowledge of the VCT services. University students attended classes at the different sessions and this deterred their attendance of the focus group discussions. A small sample of university students was used for this study, hence the findings of this study cannot be generalised to other settings.

However, generalisation in a qualitative study such as this is not significant because the study has intrinsic value of its own and has heuristic relevance (Botma et al 2007:55). The study helped to obtain an in-depth understanding of the factors influencing the use of VCT services by the university students by its use of FGDs and field notes to collect data and its use of purposive sampling technique to select the sample. The FGDs were collected and analysed until no new themes or perspectives emerged and when redundancy was achieved (Polit & Beck 2008:351). The data collected during the FGDs was supported by field notes, which were used as part of the data analysis. The purposive sampling technique helped to select participants who were able to provide valuable information about the factors influencing the use of VCT by university students (Burns & Grove 2009:355). The theoretical significance of the study, its applicability to public health practice and its influence on future research activities therefore remain unquestionable.

### **5.4 RECOMMENDATIONS**

This section makes suggestions for further research and provides recommendations for policy and practice.

#### **5.4.1 Suggestions for further research**

The findings of this study have important implications generally for HIV/AIDS-related research. The researcher recommends that further research be conducted to determine why HIV/AIDS-related stigma and discrimination is still high among university students. Evidence of stigma and discrimination associated with HIV/AIDS looms large in the narratives, with many of the university students admitting that they were afraid to go for VCT because of the fear of rejection and isolation by friends and family members. They also mentioned that they were afraid to go for VCT because of the fear of being judged and labelled if they are found HIV positive. Research has shown that HIV/AIDS-related stigma and discrimination is still high in many South African higher education institutions despite various strategies and programmes to curb it (HEAIDS 2010:93). With regards to HIV/AIDS-related research, a key message from the current study is the need for more studies to ascertain why HIV/AIDS-related stigma and discrimination is still high among university students and evaluate the effectiveness of current strategies and programmes for reducing HIV/AIDS-related stigma and discrimination among this group.

The researcher further recommends that a quantitative study involving large sample be conducted in order to generalise the findings of the study to other settings. One major limitation to the present study is that a small sample of university students was used for this study, hence the findings of this study cannot be generalised to other settings.

The researcher further recommends that a study to design the strategies to improve the uptake of VCT by the university students be conducted.

#### **5.4.2 Recommendations for policy and practice**

The findings of this study raise a number of important issues for policy and practice. There is an urgent need for HIV education and mass media programmes in order to address the problem of HIV/AIDS-related stigma and discrimination among the students. Such programmes can include student-led prevention activities including drama groups, residence workshops, media and marketing projects, marches, games, poetry slams and community outreach. Evidence from the present study suggests that HIV/AIDS-related stigma and discrimination is high among the university students.

There is need for HIV education programmes to address the problem of misconceptions circulating about HIV/AIDS and VCT among the university students. The present study reveals that a number of questionable beliefs, including that it is better to live without knowing HIV status, that HIV testing is for people with AIDS symptoms and for people engaging in risky behaviours, that one has to bring his or her needle when going for VCT and that VCT procedure is painful still appear to circulate among the university students.

The VCT services need to be student friendly in order to make them more acceptable to the university students. Participants in this study were discouraged from going for VCT because the VCT counsellors were old. There is need for VCT services to be provided by other students in order to make them more acceptable to the students. Research has shown that young people are likely to respond to programmes conducted by their peers (Njagi & Maharaj 2006:121).

There is an urgent need for VCT services to be made more accessible in order to boost their uptake. The present study reveals that university students were dissuaded from going for VCT because the VCT services were 'too far and too hideous' for access by students. Research has shown that accessible VCT services have high number of people seeking them than inaccessible ones (Angotti et al 2009:2268).

There is also an urgent need for increased allocation of human and infrastructural resources in order to improve the uptake of VCT by university students. The participants in this study were discouraged from seeking VCT because the university's VCT facility had only one nurse and who was not always available most of the times and there was only one VCT room at the university where all students went for HIV testing. Therefore the university needs to employ more nurses and to establish more VCT rooms in order to improve the uptake of VCT by the university students.

## **5.5 CONCLUSIONS**

VCT is an important strategy for fighting the HIV/AIDS epidemic. However, the uptake of VCT is still low in South Africa (Department of Health 2010a:36). In response to the low uptake of VCT, the South African government formulated the National Strategic Plan on

HIV, STIs and TB 2012–2016 in order to boost the uptake of VCT services (SANAC 2011:19).

The South African higher education sector is no exception and is being affected fundamentally by the epidemic. However it is reported that the uptake of VCT among university students is still low (HEAIDS 2010:39). In response to the low uptake of VCT services by tertiary students many South African higher education institutions implemented the First Things First campaign in 2012 in order to boost their uptake (UNISA 2012:15).

Understanding the factors influencing the use of VCT services by university students is an important issue. The purpose of the study was to explore factors influencing the use of VCT services by university students in order to identify the possible barriers and enhancers of such services in this group. The study therefore explored the factors influencing the use of VCT services by university students in order to identify the possible barriers and enhancers of such services in this group. The study has provided insight and a better understanding of the factors that influence the use of VCT by university students. The study findings have helped to formulate recommendations in order to boost the uptake of VCT by university students.

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Annexure A

Research Clearance Certificate from UNISA Ethics Committee



Annexure B

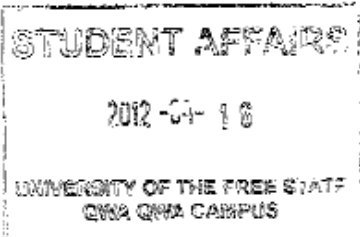
Letter to the University of Free State asking permission to conduct the study

Date: 12 April 2012

The University of Free State

QwaQwa Campus

Approved.  
T. I. Manku



To Whom It May Concern

**RE: Request for Permission to Conduct Research at Your University**

I hereby request for permission to conduct research at your university for academic purposes. I am currently enrolled for a Masters degree in Public Health with the University of South Africa. My dissertation is on **Factors Influencing the Use of VCT by University Students**. The study will be conducted among university students at your institution. The information received will be treated anonymously and confidentially. The study will help to explore factors influencing the use of VCT services by university students in order to identify the possible barriers and enhancers of such services in this group. Your cooperation towards this is highly appreciated.

Yours sincerely

Mr. J. Mbengo

(Masters of Public Health Student)

Signature.....

Cell: 0728356393

Received  
14 April 2012  
T. I. Manku

Dear Mr. Manku, if permitted, the students would wish to start ASAP.  
This letter was brought to my office and I told Mr Mbengo that your office will give the OK if found to be permissible.  
Regards

Annexure C

Permission Letter from University of Free State





## HOUSING & RESIDENCE AFFAIRS

02 May 2012

Mr. F Mbengo  
 Child Welfare Qwaqwa  
 P.O.Box 6031  
 Phuthaditjhaba  
 9866

Dear Fungai

It gives me pleasure to inform you that the Assistant to the Campus Principal (Administration) has approved your request to conduct your studies as per your area of study.

You are as well allowed to use the Residences for your focused study.

Wishing you well in your studies.



Rev. T.H Nkoana

Deputy Director: Housing and Residence/Student Affairs

Annexure D

Interview Schedule

**Grand tour question:**

*What factors influence the use of VCT services by university students?*

**Study objectives**

- Explore and describe factors which influence the use of VCT services by the university students.

Develop strategies to improve the uptake of VCT by the university students.

Annexure E  
Consent Form

### Letter of Informed Consent

**Study Title:** Factors Influencing the Use of VCT by University Students.

**Investigator:** Mr F. Mbengo

Mr Mbengo is a Masters of Public Health student with the University of South Africa. Mr Mbengo is conducting a study on **Factors Influencing the Use of VCT by University Students** as partial fulfilment for his Master's degree. The study will help to explore factors influencing the use of VCT services by university students in order to identify the possible barriers and enhancers of such services in this group.

Approval to conduct the study has been obtained from the University of Free State, and the UNISA Department of Health Higher Degree Ethical committee. The study procedures involve no foreseeable risks. The data will be collected by means of focus group interviews. The focus group interviews will be tape - recorded in order to enable the researcher to capture your views. The focus group interview will take approximately one hour. You are free to ask about the study and you can call Mr F. Mbengo on cell number: 0728366393 if you have any further questions.

Your participation in the study is voluntary; you are under no obligations to participate. You have the right to withdrawal at any time you feel to do so and your relationship with the researcher will not be affected at all. Your identity will not be revealed and confidentiality will be maintained at all times.

Researcher's Signature..... Date.....

Informant's Signature..... Date.....

## Annexure F

Field notes: an example

## **Annexure F: Field notes**

### **Field notes – an example**

Focus Group A

8 members, 4 males and 4 females

Race: all blacks

Average age: 21

7 in first year and 1 in third year

The sitting arrangement is circular

From left to right, 3 males, followed by 4 females and lastly 1 male

Appearance: All smartly dressed in casual

Behaviour: The group members are all free to express themselves, their views towards the subject very striking. They are not shy. They all maintain eye contact with the researcher.

Communication: The communication among the group members is group-centred; no individual group members are allowed to dominate the discussion.

General group discussion: The general consensus among the group was that it is difficult if not impossible to be tested by a person who is known to you. Most of the group members said they prefer to go alone for VCT, and not in the company of a friend.

Annexure G

Interview Script: Focus Group A



## Focus Group A

Interviewer: Have you ever gone for VCT?

If yes, what were some of the reasons why you decided to do so?

Participant A8: It was like when I was doing matric, in June I felt very, very sick, I got flue but this one ... i had to confirm whether I had HIV or not. And the other reason I went there I'm a blood donor, and when you want to donate blood, they test you first before you donate the blood.

Participant A7: I was also doing matric, I just went there because they were close and they were also giving out the kit, the bag and everything. (Laughing) ha ha ha.

Interviewer: So what motivated you to go there?

Participant A7: the kit.

Participant A5: I was forced because I was pregnant and the second time I went there I wanted to be more responsible in what I do especially the sexual one.

Interviewer: What do you mean when you say you were forced?

Participant A5: You cannot continue with procedures at the doctor when they don't know your status, they cannot help you especially when like giving birth, they have to know you status first.

Participant A3: Like it was free and they give rewards and they had like good news and stuff.

Interviewer: Was it easy decision to go for VCT?

Participant A8: First time it was not.

Interviewer: What do you mean first time it was not?

Participant A8: Because as I said earlier I was having an impression that I might be HIV positive because I was very sick and when I got my results I found out that I'm HIV negative and they told me that I must come back after 3 months and then I was like hah there is nothing to fear.

Participant A7: I was not, in that small room I was alone and it was like waal, it was scaring.

Participant A3: Yes it was very easy to me.

Participant A5: It wasn't easy, because if you don't know what your partner is doing, you might have it or not. So it wasn't.

Interviewer: Did you feel supported and comfortable with the professionals who did the VCT?

Participant A8: At first when I entered before the testing I was not comfortable at all, I was comfortable when they became serious and put the jokes aside. And my first time testing I was not comfortable at all.

Interviewer: Why you felt not comfortable?

Participant A8: They were nurses, not male nurses but female nurses, and I thought maybe some of them are my mum's friends and what if they tell my mum that I went there so I had to hope that I'm not actually positive. Then it actually happened that I was negative and then I felt good after. And they were all encouraging me to come back and they were saying you are welcome to come back. (The group members laugh).

Interviewer: What about their conduct, was it professional?

Participant A8: Yes it was professional, it was good, and nothing was bad.

Participant A7: Yes I did feel comfortable and supported (nodding the head) because they counselled me before the testing. It was all jokes from the start till the end. I entered with a smile. Everything was good.

Participant A5: Yes I did. She was even friendly with me, sharing jokes. She was a professional nurse.

Participant A3: It was friendly and stuff.

Interviewer: Were there any fears that you had as you waited for your results?

Participant A8: They were fears. Out of all things like I thought I might have HIV, I was not excluding them I was not excluding them, I was also worried like what if my parents had it and they were afraid of telling me. Maybe I got this since from birth. That was it, I don't remember anything else.

Participant A5: Uhh, You know in life you can meet someone and fall in love with that person not knowing what he was doing before you meet him. What was he up to all the time before he comes to me.

Participant A7: The only fear that I had was the fear of the thought that what if I was HIV positive. That was it.

Participant A3: I was not thinking at that time, I did not have any fears.

Interviewer: For those who did not go for VCT, what were the reasons for not going?

Participant A6: I did not see the reason of going there.

Interviewer: Why?

Participant A6: If my mum knows her status and my dad knows his status then I also know my status. (Group members laugh).

Interviewer: Why?

Participant A6: I haven't done something wrong like touching someone's blood and things like engaging in sexual activities.

Participant A4: I was there but the long queue made me to come back and the other reason I'm that kind of a person who is always positive, I have told myself that I don't have it.

Participant A1: As I have said I have been always positive, I have always lived a positive lifestyle so I did not see the reason.

Interviewer: What do you mean when you say you have always lived a positive lifestyle?

Participant A1: It's like I don't do anything to catch HIV. I don't touch blood, I do positive lifestyle.

Participant A4: The other reason is that it's better if I don't know my status, if I know my status obviously I will gona be stressed, it will be hard for me to tell my parents and I will be thinking of committing suicide and those kind of things. It's better if I don't know it.

Participant A2: For me I did not see the reason why I should get tested, there was like no time for me to test. I'm that kind of a guy that thinks a lot. I think I would kill myself by thinking, but not necessarily say I will never test, but I will. But to me I felt like it was not like that time for me to test. I have like to mentally tell myself that I have to do this, I have to be ready and then I gona do it. And I don't want to do it because I'm seeing somebody doing it or what, what, I want to do it because I'm ready and I will do it.

Participant A6: I don't have any option if I found that I'm HIV positive, the only thing that comes to my mind is to kill myself, it's the only thing that comes to my mind. So I think it's better never to get tested.

Participant A6: I also think that I'm not ready to get tested.

Interviewer: Why?

Participant A6: It's my feeling. (Other group members then laugh).

Interviewer: Would you consider being tested by a person who is known to you?

Participant A6: I prefer a stranger because she does not know me, If I become positive I will be embarrassed and disappointed if the person is known to me.

Participant A4: Because I know that person, he or she will be like oh my gosh you get HIV and all those kind of things. I think it will be hard for that person to tell me that I'm HIV positive if he or she knows me.

Participant A2: Me personally if there someone that I know from my family I would not want them to know exactly because for me it hurts a lot for them to know that I'm HIV positive . For me I would rather prefer to go first and decide later how I would tell them I'm HIV positive.

Participant A8: I think it depends with the level of trust that I have in that person and the level of trust that person has in me, whether I actually trust that person. If I don't trust that person and knows that person then it's going to be difficult.

Interviewer: Given the option of testing at the university and outside the university setting which option would you consider and why?

Participant A4: I would consider going outside the university because I will go alone without friends it's better that way. Because if I'm here at the university obviously my parents are not here and if I find out that I have it obviously there is no one who will console me. At least If I'm outside the university I will get my parents and they will console me.

Participant A6: I prefer the university because as I go out I will disappoint my parents because I have to tell them first. I prefer telling a friend first, then fine and all the stuff

and be prepared to tell my parents because they are the only people that I don't want to disappoint in life, they will be the last to know it.

Participant A5: University or outside it does not matter

Interviewer: Why it does not matter?

Participant A5: Because at the end of the day whether you are at the university or outside, the result will be the same.

Participant A8: I went to VCT so many times so I am actually confident that I'm HIV negative.

Participant A2: I prefer outside.

Interviewer: Why?

Participant A2: Because it's all about me, nobody else it's all me, nobody else it's all me. So I go outside telling myself what if this happens, university no way!, what if I break down and cry.

Participant A7: I prefer outside, because nobody knows that I'm going there for testing, only me. If I go with people they would follow what was my result. I do not want people to know my status because it's my secret, it's personal.

Participant A6: I prefer here at the university because if I go out and see someone who knows me, what would he/she say to my parents for example like in the hospital my mum would like to know why I wanted to go there. If I'm here, I just go alone to get tested and come back. If I have to be alone I just go somewhere I don't know maybe behind the buildings or in the toilets, cry and come out.

Participant A3: I prefer the outside not the university like everyone sees you going there and start to say oh! that guy was doing something, so I prefer outside.

Participant A1: It's like when you go there people already know either you are on ARVs. (All group members laugh).

Interviewer: Would you accept your friend to accompany you for VCT or else you rather go alone?

Participant A7: I prefer a friend, the one I trust the most, because even if I go there alone and come back I still need her to sit down with me. She will be there to comfort me when I'm back.

Participant A4: Never trust a person. (All the group members laugh).

Interviewer: What do you mean when you say never trust a person?

Participant A4: Never trust a person. Okay fine, let's say I go with my friend there and then I say to her my status is this way and she is like yoh!, and she is acting all whatever thing, she is HIV positive or negative.

Participant A2: I think like for me the reason it's like sometimes knowing yourself that you are HIV positive is a burden not only to yourself imagine telling somebody that, people are different. How would they handle the truth? Maybe for them it will be too much to know that I'm living with HIV. Me I don't want to put anyone through that. I want to handle it on my own; if it kills me then it will eat me alone.

Participant A6: Just telling people that you are HIV positive, their attitude. If I tell a friend then it means that I have to lose a friend, so it's better if they don't know. Anyway it's my secret I have to know by myself.

Participant A8: To me it depends on the time like what have I been doing for the last couple of times. If I have been up to no good behaviour, then I would go alone. And if I have been good I will go with a friend because you already know who you trust but you don't know who trusts you.

Participant A5: I prefer myself

Interviewer: Why?

Participant A5: Haibo, it's private and confidential, I will tell them when I'm ready. I will tell whoever to tell when I am ready. (She nods her head). (All the group members laugh)

Interviewer: In your view what do you think are the reasons why people avoid VCT?

Participant A7: I think it's because of the counselling before the testing. I suggest that they start by the testing and then you get to the status and then go for counselling.

Interviewer: Why do you think so?

Participant A7: Because the counselling discourages people. One of my friends went there and then they started counselling and she decided not to test because of the questions what you gonna do, this and this and all that.

Participant A3: Because I think they already know their status, they start to count the number of people they have slept with, okay there is no way I'm HIV negative. They like I'm not going there I'm already know I'm positive and stuff. (She nods her head).

Participant A5: You know sometimes it's like if my partner is HIV positive or negative then I'm also HIV positive or negative. People have that stigma.

Interviewer: Could you please elaborate more on that.

Participant A5: Like judging yourself, okay I haven't slept with bla bla bla without a condom so I'm HIV negative and sometimes with your judgement you might be HIV positive.

Participant A1: I think the reason is that people already tell themselves that they are HIV because in this lifetime it's everywhere. (Group members laugh). It's very difficult to tell yourself that I'm HIV positive; I'll live a positive lifestyle and forget about that.

Participant A2: I think most it's fear, like what if you have it, what you gonna do from here and people have this thing like if you are not cured by the HIV itself then you are cured by yourself, and after you knowing you are HIV positive then you start killing yourself. From there the only thinking you have is like, you are HIV positive, the prospect of you having a family is limited. So I think the fear of knowing if you are or not.

Participant A4: I think they have this perspective of this if, okay we all know the symptoms of HIV so what is this use of going there because you are healthy, and the other reason is that if you have HIV obviously you gonna get stressed and all those kind of things and when you didn't go for testing you were not stressed and whatever.

Participant A8: It think the fear of going there its actually people consider what are they going to lose if they go there and find out they are HIV positive, they all don't want to compromise this; I have got friends, good friends and family them much HIV, why still not keep these two (friends and family) I have first, I don't want to lose.

Participant A6: I think people have this theory that once you have HIV, you get flue and then you die. They have got that theory that when you are HIV positive you start getting stressed and then you die. So we believe that after knowing your status you die. (She nods her head). It's better not to know your status.

Participant A2: Another thing it's like you know like families, I have seen like a person from my family like; there was a family member they thought or assume he has HIV and how they treated him like you know for me I imagine myself in that shoes like you know they will think the same way like I have been killed by HIV, and this and that. It's like when you start to come out that you have HIV people start to turn their backs on you and all things like that.

Interviewer: Why do they turn their backs on you?

Participant A2: Because HIV, the stigma for HIV, people fear the person with HIV.

Participant A6: I think that people do not have enough information about HIV; they think that if they are HIV positive, they will be isolated from other people.

Interviewer: In your view what can be done to improve the uptake of VCT services by university students?

Participant A8: I think the like that happened last time, come and get tested and get a memory stick, it was the best! It was like I wana go there and get my consolation prize. (The group members laugh).

Participant A2: It was the best like if they increase the memory gigs like 64 gigs or something (The group members laugh).

Participant A2: For me personally like if they do constant testing like you know they brought the testing station like here, I think they should bring it constantly; they should not bring it once and leave it like that. Because sometimes you tell yourself that you don't want to test but as you see people going there you get that sort of encouragement to do that.

Participant A4: I think they should like put it in their programmes for the first years as they have got this thing of orientation. They should be there and tell first years that there is VCT here at school and whatever.

Participant A5: I think there should be more counsellors; it's like for now there is only one counsellor and she is hardly available most of the times. If they could like extend the offices and have more counsellors that will be better. Sometimes you go there; you want to test and only to find out that the nurse is not available.

Participant A6: I would say that our V. C. T its far, it's like only few people go there at the library building you don't even see it because it's damn very far, only if it was somewhere there (pointing) by the time you pass going to the dining hall you will say let me go there, one day will be one day that I will have to go there, but then it's very far. It's so far.

Participant A7: I think the poster of reminder, every time you go the entrance you have to go there and check.

Participant A8: I think there should be like some support groups you know, because let's just say you go and get tested and get counselling, you are good that time and that counselling is going to exhaust over time and you can't rely on one thing. But if you keep going to the support groups and stuff you actually know that you will not lose hope, you will even encourage it to your friends.

Participant A3: They should put VCT somewhere we all go for instance DH (dining hall). We all go there and you will see VCT and then I have to go there.

Participant A6: People who counsel you should not be very serious with you, they should add jokes to that, be there and there (acting by hands). When you are serious I will start getting worried and stressed up, so I won't go for testing, so if you loosen up a little bit it's much better.

Participant A3: I have noticed that when you are testing the room is like really dark and you can actually feel fear like inside it should be bright and stuff, it will encourage you. (Group members laugh).

Participant A2: Like it should lighten the mood, if they have things like when you go there like when you are waiting for the results maybe they should have a television set, sharing some jokes and something like that you know, just to enlighten. It's like it's so serious, it's like tents when you get inside there you start killing yourself right there thinking about that. If something distracts you it will be better even when telling you your status, it will be comfortable.

Participant A8: I don't know if it's a bad idea. Back home my friends don't go when VCT is head on head, they go like there is a blood donor, let's pretend as if we are going to donate blood, they will sms us the results if our blood is not successful because of HIV. (Group members laugh).

Participant A2: One more thing I heard that when you go for the VCT you have to bring your own needle. I think that one it's a no, no, because most people like especially in res they say I didn't test because I didn't have a needle. They use that as some form of an excuse. So if like there were needles there, the needle will not be an excuse, because people would say I didn't have my needle and something like that, they are using it as an excuse. So everything should be there, the only person it's you, go there and test. No excuse.

Participant A6: And the thing of making appointments, you have to make an appointment before we offer you testing. I think they should cancel that, because once you do the appointment and then they say you must come next week. By then I would have changed my mind. So it's much better if there is no appointment and stuff like that.

Participant A1: It would be better if like there is no specific room for HIV testing, like you just go to any room. Because if there is a specific room the people already know 'uh' (Pointing finger) (The group members laugh).

Participant A2: Already know obviously you are collecting ARVs or else.

Participant A4: The other thing is that they should avoid the long queues; maybe they should bring about VCT to the hostels to test. It's like I went there and stand for an hour till I said 'no' I can't stand anymore.

Participant A2: It's like you lose your nerves when you go there, you tell yourself, you encourage yourself and when you go there you start discouraging yourself because of the long queues.

Participant A4: Yah.

Participant A7: I think they should be more students called peer educators, they should be there more actively and more encouraging.

Participant A3 If there is one VCT centre all the people go there and I would like I want to go there and there. There should be many VCT sites at the university when someone goes there you also go there and there, and stuff.